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SECOND AND THIRD
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to

CATALOGUE

of the

COLEOPTERA

of

AMERICA, NORTH OF MEXICO

By
CHARLES W. LENG, B.Sc.
Director
MUSEUM, STATEN ISLAND INSTITUTE OF ARTS AND SCIENCES
Research Associate
AMERICAN MUSEUM OF NATURAL HISTORY

and

ANDREW J. MUTCHLER
Associate Curator
in charge of
Coleoptera
AMERICAN MUSEUM OF NATURAL HISTORY

Mount Vernon, N. Y.
JOHN D. SHERMAN, JR.
December 18
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AFFECTIONATELY
DEDICATED TO

SAMUEL HENSHAW

IN CONTINUED APPRECIATION OF
THE HENSHAW LIST OF COLEOPTERA
PUBLISHED ALMOST HALF A CENTURY AGO.
WE REJOICE IN HIS UNABATED
INTEREST IN BIBLIOGRAPHICAL MATTERS.

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SIGNS AND ABBREVIATIONS

‖ indicates name preoccupied.
‡ indicates name cited in error.
† indicates introduced species.
[1] A figure one following name means it was based upon a single specimen.

ab.	aberration
auct.	authors
fide	according to
ined.	unpublished
i. litt.	in a letter
n. n.	nomen novum, name substituted for one preoccupied.
nec	not
s. str.	sensu strictu, in a restricted sense.
subg.	subgenus
subsp.	subspecies
syn.	synonym
var.	variety

For other abbreviations (of localities, etc.) see original catalogue.

INTRODUCTION

In the second supplement to the Catalogue of Coleoptera of America, north of Mexico, we record the species, subspecies, and "aberrations," described during the period from January 1, 1925, to December 31, 1930. As in the catalogue and first supplement, the new species are serially numbered, with subspecies and varieties indicated by the addition of a letter to the serial number of the species with which they are allied. An unusual number of names have been proposed for so-called "aberrations;" these have not been numbered, but are not necessarily synonyms. Many are recognizable variations which, however, have been regarded by some author or reviewer as of less than subspecific rank.

By thus numbering the names which have been proposed we do not intend to present our own opinion as to their validity, but to reflect the opinions of the authors quoted. In a few instances, where the opinions conflict, we have, as far as possible, presented both views.

In preparing this supplement we have used as a basis the data assembled in Entomological News, and added thereto those found in the Zoological Record and, in a few instances, others cited in Biological Abstracts. The result was then compared with the original papers, as published in various periodicals, here and abroad, and in many instances, preliminary copy was sent to the authors for correction. Finally comparison was made with the Junk Coleopterorum Catalogus, which disclosed some differences which have been noted, but not always followed.

The original intention was to print the second supplement in 1931. Financial difficulties having caused a postponement, we have taken advantage thereof to carry the bibliography down to December, 1932, and to indicate the new species, etc., proposed in 1931 and 1932, as a third supplement.

In the bibliography we have included all contributions bearing directly or indirectly upon the classification of Coleoptera, as well as a few papers of literary interest. The period covered by this supplement has produced several papers of importance in clarifying the classification. Bradley's Manual of the Genera brings together in one volume, for the first time since 1883, definitions of nearly all the genera. Jeannel's Monograph of Trechinæ is an example of able taxonomic work covering the species of the old and new world.

Tillyard's Insects of Australia and New Zealand reviews the classification with special reference to the phylogeny, and recent discoveries in fossil insects. Forbes' studies in venation and wing folding patterns afford an independent view of relationships. Finally and most important we have included, though not published until 1931, "An Illustrated Synopsis of the principal Larval Forms of the order Coleoptera" by Böving and Craighead. By the publication in this paper of the results of the studies of many years, it becomes possible to compare the existing classification of adult beetles with one based entirely upon their immature stages.

Happily for the permanence of our classification there is now a more substantial agreement between the two than when MacLeay in "Horæ Entomologicæ" (1819-1821) attempted to make such a comparison. Dr. Böving's statement of this fact is "As a rule the classification of the larvæ agrees with the commonly recognized classification of the imagines, and particularly well with the one followed in Leng's catalogue." The division of the order into suborders Adephaga and Polyphaga, and the subdivision of the suborders into superfamilies, grouped into series, is found in both systems. The differences consist in the composition of the suborders, and of their subdivisions, in which the knowledge of larval relationships affords valuable evidence, heretofore lacking. A brief statement of some of these differences follows.

ARCHOSTEMATA

The families Cupesidæ and Micromalthidæ, the anomalous characters of which have heretofore been recognized, are ranked as a third suborder by Böving. He says "I cannot see how we can escape giving to this group the rank of a suborder, the Archostemata of Kolbe, as it can be joined neither with the Adephaga nor the Polyphaga." Forbes, from studies of wing folding pattern, grouped these families under the same name. Tillyard, though he placed Cupesidæ in Adephaga, described it as "an annectent group between the Adephaga and Polyphaga." There is thus a substantial agreement on the division into three suborders; and in future catalogues the first should be on phylogenetic grounds, the Archostemata.

ADEPHAGA

The family Rhysodidæ is transferred by Dr. Böving from Polyphaga to Adephaga. "The larva of Clinidium," he says, ".... can without reservation be placed in the suborder Adephaga." The superfamilies Caraboidea and Gyrinoidea are sustained by characters of their larvæ, which also afford important help in arranging in natural sequence the subfamilies and tribes of Carabidæ and Dytiscidæ. On the basis of larval characters Cicindelidæ, Carabidæ, Omophronidæ, Haliplidæ, Hygrobiidæ, Noteridæ, Dytiscidæ, and Amphizoidæ, are entitled to rank as

families, with the rank of the Pseudomorphidæ unknown. The subfamilies indicated in the Carabidæ are Lebiinæ; Dromiinæ, Odacanthinæ; Driptinæ, Nebriinæ; Loricerinæ; Carabinæ, Cychrinæ, Chlæniinæ; Licininæ, Bembidiinæ, Sphodrinæ, Broscinæ, Dyschiriinæ, Scaritinæ, Elaphrinæ; Patrobinæ, Pterostichinæ, Amarinæ, Harpalinæ, Glyptinæ. The semicolons in this enumeration separate the related groups of subfamilies. The Trechini appear to be separable from Bembidiini, on their larval characters, only by differences of tribal rank.

As to the sequence of the suborders Dr. Böving considers that it would "be logical to place the Adephaga third, as the more modern of the three," "but for practical purposes it appears more advisable to rank the suborders in the commonly accepted sequence." The well developed tarsus of adephagous larvæ, carrying one or two distinct and movable claws, may be a primitive character, as regarded by us in 1920; and the great similarity in this respect between the larvæ of the Caraboidea and those of certain neuropterous larvæ is interesting and possibly significant. However there are several polyphagous larvæ, specifically mentioned by Dr. Böving, in which the tarsungulus is "divided by a faint suture into a proximal and distal portion which possibly correspond respectively to tarsus and claw." In Dr. Böving's definition of the suborders by larval characters, the Adephaga are placed second, and the resemblance of their legs and claws to those of the Archostemata seems to us to indicate this as their natural sequence.

POLYPHAGA

The greatest difficulties in the classification have been in this suborder, and in the differences between the opinions expressed by Böving, Forbes, and Tillyard, they are still apparent. The removal of Cupesidæ and Micromalthidæ to Archostemata, and of Rhysodidæ to Adephaga, simplifies the classification of the Polyphaga; and fortunately the isolation of the Scarabæoidea, of the so-called Phytophaga, and of the Hydrophiloidea and Staphylinoidea is not questioned; though, as to the latter two, the composition is somewhat altered. Believing that the larval characters afford the safest guidance, not however to the exclusion of other considerations, we review the superfamilies in the sequence adopted by Dr. Böving.

Staphylinoidea. The component families, based on larval characters, would be Limnebiidæ, Hydroscaphidæ, Leptinidæ, Ptiliidæ, Anisotomidæ; Platypsyllidæ, Scaphidiidæ; Silphidæ, Staphylinidæ, Pselaphidæ, Scydmænidæ. The families also included, though their larvæ are imperfectly known or entirely unknown, are Clambidæ, Brathinidæ, Sphæritidæ, Sphæriidæ, and Micropeplidæ. The differences between this and existing classification is the removal from Hydrophilidæ of the aberrant genera Limnebius, Ochthebius, and Hydræna; and the suppression of Silphoidea as a superfamily.

Forbes reached a similar result from his studies of the wings. "Ochthebius and Hydræna," he says, "do not belong here (in Hydrophilidæ), but with the aberrant "Silphidæ;" and the latter he classifies with his Staphyliniformia.

It should be noted that within the families Anisotomidæ and Staphylinidæ, the larval characters indicate many subfamilies, with Oxyporinæ, Habrocerinæ, and others, quite definitely separated; and that the Histeridæ, on larval characters, are associated with Hydrophiloidea, a view in which apparently Forbes' conclusions are not entirely in accord.

Hydrophiloidea. In this superfamily Dr. Böving groups Histeridæ and Helophoridæ, "on account of an unquestionable conformity in the development of the fundamental systematic characters" of their larvæ; Spercheidæ; Hydrochidæ and Hydrophilidæ, the latter divided into subfamilies Berosinæ, Hydrophilinæ, Hydrobiinæ, and Sphæridiinæ. The treatment of Histeridæ, regarded by Forbes as a superfamily, and by Tillyard as "very distinct and isolated," is at first sight rather startling; but it is to be noted that Forbes also found that the venational characters seemed "to link with the Hydrophilidæ on one side and more closely to the Lamellicornia on the other." The views of Tillyard regarding Hydrophiloidea as "perhaps the oldest of existing Coleopterous groups" traceable "back geologically to the upper Permian" are interesting. He further says "the fossil evidence, so far as at present available, would tend to indicate that....the development of longitudinal striæ and intervals is an entirely new formation. If this be so, the almost smooth elytra of many Hydrophilidæ probably represent the most primitive type." The same argument would apply to the comparatively smooth elytra of the Histeridæ, and thereby support Dr. Böving's classification of the larvæ. Moreover, while Hololepta and Hydrophilus in the adult stage seem far apart, some of the small Saprini are not so dissimilar to the Sphæridiinæ.

Cucujoidea. Dr. Böving finds three types of larvæ in the Polyphaga. The primitive type is found in its most characteristic and original form in such families as the Limnebiidæ, Leptinidæ, and Anisotomidæ. From it are derived the more or less specialized larvæ of the Staphylinoidea and Hydrophiloidea, which have therefore preceded other Polyphaga in his conspectus.

A distinct polyphagous larval type is found in the series Cucujoidea. It shows such close affinities with the staphylinoid-leptinid type as to be placed next thereto in the conspectus. The families included are (semi-colons indicating their grouping) *Eucinetidæ,* Derodontidæ, Monotomidæ, Rhizophagidæ; *Languriidæ,* Cryptophagidæ, *Silvanidæ,* Cucujidæ, *Prostomidæ; Catogenidæ, Læmophloeidæ,* Phalacridæ, *Smicripidæ,* Corylophidæ; Nitidulidæ, *Cybocephalidæ;* Sphindidæ; Lathridiidæ, Murmidiidæ, Endomy-

chidæ, Coccinellidæ, Erotylidæ, *Dacnidæ,* Melandryidæ, *Scraptiidæ,* Anthicidæ, Byturidæ; *Bothrideridæ,* Colydiidæ, Mycetophagidæ; Oedemeridæ, Cephaloidæ; *Zopheridæ, Synchroidæ,* Pedilidæ; Eurystethidæ, *Salpingidæ,* Pyrochroidæ, *Boridæ,* Pythidæ, Othniidæ; Alleculidæ, Tenebrionidæ (to be divided into many subfamilies), *Nilionidæ,* Lagriidæ. In addition, though the larvæ are imperfectly known, the Monommatidæ and Lymexylidæ are included, and with doubt possibly the Mordellidæ.

These families have been heretofore, with some exceptions named below, the components of the superfamilies Cucujoidea, Tenebrionoidea, and Mordelloidea, which thus become united as one superfamily, but divided into a greater number of families. The families added are indicated by italics. On the other hand, Mycetæidæ, Euglenidæ, and Monoedidæ are reduced on larval characters to subfamily or tribal rank. The exceptions above referred to are Eucinetidæ, formerly classed as a subfamily of Dascillidæ, but agreeing in its larval form, apart from the lack of jointed urogomphi, with the leptinid association of the Staphylinoidea; Corylophidæ, usually placed as an aberrant family in the Silphid association: Sphindidæ, the larvæ of which represent "unquestionably a simple, primitive cucujoid type," and have heretofore been included in Bostrichoidea.

In this treatment of the Cucujoidea it is to be hoped that the clues to actual relationship afforded by the larval characters, so thoroughly studied by Dr. Böving, may be reconcilable with adult characters. But it cannot be denied that Forbes' classification (Journ. N. Y. Ent. Soc., XXXIV, 113-115), based on wing venation and folding pattern, is not in agreement. Of the four series, Haplogastra, Bostryciformia, Diversicornia, and Dryopiformia, into which he divides the Polyphaga, only the first can, by transferring the Scarabæoidea, be compared with Dr. Böving's leptinidstaphylinoid association. We admit that our tendency is to regard the larval characters, based on mouth parts and organs of locomotion, as the surer guide; but we cannot conceal the differences that are apparent in Forbes' views.

Byrrhoidea. The larvae of this series are found to represent another distinct polyphagous type, not linked by any larval type known up to this time with the primitive Staphylinoidea. This type of larva is in fact so distinct that Dr. Böving appears to have considered founding a suborder thereon. However some of the derived families of the byrrhoid type and some of the cucujoid type approach one another. Wherefore Dr. Böving writes "rather isolated as the series Byrrhoidea appears in the polyphagous suborder, it does not seem necessary to rank it and the families and series derived from it as a separate suborder." These families and series include, in Dr. Böving's conspectus, the remainder of the Coleoptera. The

Byrrhoidea includes only the family Byrrhidæ. Two series, Dascilloidea and Cleroidea, are descended directly from the Byrrhoidea; Dryopoidea can be derived through the Ptilodactylidæ; Elateroidea, through the Eurypogonidæ; Cantharoidea and Scarabæoidea from other dascilloid or dryopoid families.

With the Cleroidea may be associated Mordelloidea, Bostrichoidea, and the so-called phytophagous assemblage. The series Meloidea may also belong here but Dr. Böving adds that there are some reasons for considering the possibility that it might be related to the Cantharoidea.

The composition of the series thus hypothetically derived from Byrrhoidea differs in some cases from that heretofore assumed and will be discussed below.

Dascilloidea. The Eucinetidæ are removed to Cucujoidea, other families to Dryopoidea, as stated below. The Nosodendridæ and Heteroceridæ are added, making four families, viz: Dascillidæ, Heteroceridæ, Helodidæ, Nosodendridæ.

Dryopoidea. This series includes new families Ptilodactylidæ and Eurypogonidæ, taken from Dascilloidea; Psephenidæ, divided into subfamilies Psepheninæ and Eubrianacinæ of which the latter is taken from Dascilloidea; Chelonariidæ; Dryopidæ, divided into subfamilies Larinæ, Pelonominæ and Helminæ.

In the rearrangement of the families of Byrrhoidea, Dascilloidea, and Dryopoidea, discussed in detail by Dr. Böving in his paper of 1929 in the Bulletin of the Brooklyn Entomological Society, the value of larval characters in determining relationships is strikingly exhibited.

Cantharoidea. The Melyridæ, Cleridæ, and Corynetidæ are removed to a new series Cleroidea. The family Brachypsectridæ, following Blair, is considered valid on larval characters, but is included here, rather than in Dascillidæ. The Cantharidæ are divided into subfamilies Malthinæ, Chauliognathinæ, Malthodinæ, and Cantharinæ.

Elateroidea. The differences here from existing classification are slighter than in some preceding series. Plastoceridæ are included in Cebrionidæ, and Drapetes is removed from Throscidæ to the subfamily Oestodinæ of Elateridæ. Sandalidæ is treated as a family, quite distinct on larval characters from Rhipiceridæ.

Scarabaeoidea. This superfamily is unchanged, but the larval characters accentuate its subdivisions into families and subfamilies.

Cleroidea. The families included in this new superfamily are Dermestidæ, Melyridæ, Ciidæ, Ostomatidæ, Cleridæ, Catogenidæ (?), and Bothrideridæ (?). The relationship of the last two is regarded as problematical. As to some of the other families, the larval characters suggest the need of many subfamilies.

Meloidea. This new superfamily includes Meloidæ, divided into three subfamilies (after erecting a new family Tetraonycidæ), and Rhipiphoridæ. "Probably the Strepsiptera are to be classified in the Coleoptera and close to the Rhipiphoridæ," is added in a footnote.

Mordelloidea. This series, which was proposed by us with great hesitation, is reduced to the family Mordellidæ, and to its main genera Tomoxia, Mordella, and Mordellistena. Even these in the larval stage are related to several of the melandryid genera.

Cerambycoidea. This series is restricted by its larval characters to the family Cerambycidæ, divided into subfamilies Prioninæ, Cerambycinæ, Aseminæ, Lepturinæ, Lamiinæ and Disteniinæ. The Chrysomelidæ are regarded as a superfamily.

Bostrichoidea. This series, comprising Ptinidæ, Anobiidæ, Bostrichidæ, Psoidæ, and Lyctidæ, differs from the existing classification only by the removal of the families Ciidæ and Sphindidæ.

Chrysomeloidea. Larval studies indicate the necessity of separating the Bruchidæ and Chrysomelidæ, as a superfamily, and of dividing the latter into many families. Some have heretofore been recognized as subfamilies, others are the result of recent studies, and many are again subdivided; it is even stated that "when better studied, the classification of the entire family Galerucidæ will unquestionably be changed." The families indicated by larval studies are Bruchidæ, Sagridæ; Orsodacnidæ, Donaciidæ, Camptosomatidæ, Eumolpidæ, Criocerida, Chrysomelidæ, Galerucidæ (divided into Galerucinæ, Diabroticinæ, and Halticinæ), Hispidæ, and Cassididæ.

Platystomoidea. In the division of the Rhynchophora by larval characters the family Platystomidæ becomes a superfamily divided into two subfamilies Brachytarsinæ and Choraginæ.

Curculionoidea. The remainder of the Rhynchophora are divided into Brentidæ, Proterhinidæ, Attelabidæ, Apionidæ, Curculionidæ (with Lissorhoptrinæ as a subfamily), Calendridæ, Platypodidæ, and Scolytidæ. In regard to the latter it is stated that "the larvæ of the Curculionidæ and Scolytidæ cannot be separated." Belidæ larvæ are unknown.

Finally the conspectus by Dr. Böving ends with the superfamily *Lymexyloidea* for Lymexylidæ and Telegeusidæ, the larva of the latter being unknown. As far as known the larva of this superfamily approaches in important characters those of Oedemeridæ and Calopidæ, "but also greatly resembles the larval form of the ancient suborder Archostemata." "The systematic position of this series is uncertain."

As a final summary of this important contribution to the classification of the Coleoptera we note with satisfaction that, in its main

features, the classification reached after nearly two centuries of study of the adults is confirmed. The phylogeny of the order, relieved of the supposition that all its families must be traceable to a common ancestral type, becomes plainer as the morphology of the larvæ displays the wide gaps between the three suborders Archostemata, Adephaga, and Polyphaga. The difficulty of subdividing the Polyphaga on characters drawn from the number of tarsal joints, or the form of the antennæ, becomes lessened by the recognition of three types of larvæ, leptinid-staphylinoid, cucujoid, and byrrhoid, by means of which the true relationship of heretofore baffling forms may be indicated.

We congratulate Dr. Böving and his co-workers, F. C. Craighead, R. A. St. George, and others, in this country and abroad, on the successful outcome of their patient research, aided by the inspiring influence and learning of the late Dr. E. A. Schwarz. Even more, perhaps, are the students of the classification of the Coleoptera to be congratulated on the guidance in their studies afforded by Dr. Böving's work. The task remains of reconciling the differences between the classification of the adults and that of the larvæ. In this supplement we are therefore content to indicate, through this introduction, and by footnotes in the text, the alterations in the classification which are probably needed.

It is a matter of regret that the work of P. de Peyerimhoff on the Larvæ of Coleoptera (Annales Soc. Ent. France, 1933) appeared too late for its valuable comments on classification to be noticed in these supplements.

We thank the many students of North American Coleoptera who have so willingly assisted us in our work, and it is a pleasure to acknowledge for the printers, for the publisher, and for ourselves, the assistance of Miss Ethel Olsen, by whom, practically without error, the manuscript was typewritten.

Charles W. Leng

September 1, 1933. Andrew J. Mutchler

SECOND SUPPLEMENT TO CATALOGUE OF COLEOPTERA OF AMERICA, NORTH OF MEXICO

ADDITIONS AND CORRECTIONS TO DECEMBER 31, 1931

CICINDELIDÆ

Blaisdell 25; Criddle 25; Knaus 25, 29; Horn 26, 28, 30; Dawson 28; Davis 28, 29; Varas y Arangua 27, 28; Tanner 29.

In Cicindelidæ, and throughou t this supplement, the numbering indicates our attitude towards the changes proposed. Numbers at left hand margin of the page indicate changes adopted or unquestioned; numbers indented from margin indicate changes that may not be finally adopted when the group involved is restudied.

Amblycheila

2 a = 2, fide Horn 30
3 = race of 2, Horn 30

Omus *

4 a and 4 b = 4, fide Horn 30
5, 7, 9, 16, 17, 19 = races of 12, fide Horn 30
20 = lesser race of 19, fide Horn 30
21, 22, 24 = races of 12, " " "
24 a = lesser race of 17, " " "
24 b = lesser race of 9, " " "
25 = lesser race of 34, " " "
27, 34 = races of 12, " " "
15 is valid, fide Blaisdell 25
19 a is valid, fide Blaisdell 25

Cicindela **

39c. fletcheri Criddle 25-127 Mont.
39d. pigmento-signata W.H. 30-76 Tex.

Cicindela **

44d. arida Davis 28-65 (syn. 29-100)
45c. cyanocephala Varas 28-239 N. W. St.
45d. militaris Varas 28-242 N. Y. R. I.
47b. tanneri Knaus 29-47 Ut.
53g. viridula Varas 27-173 Mass. R.I.
59h. chamberlaini Knaus 25-182 Oreg.
63a. frosti Varas 27-174 So. Cal.
69b. kansanus n. n. Knaus 27-24 and 30-79 for violacea ‡ Kan.
86g. colossea W. H. 26-169 Cal. Is.
52 a = 52, fide Blaisdell 25-79
53 e¹, 59 b¹, 61 c, 61 c¹, 61 c², 65 d are synonyms, fide Tanner 29

* The names heretofore proposed in Omus, except those above referred to, are treated as synonyms by Horn 30. His opinions (based in part upon studies of genitalia) may not be entirely acceptable to American students, more familiar with the living beetles and their environment.

** Horn 30 gives a check list in which the species considered valid are serially numbered, the "larger races" are prefixed by Roman numerals, and the "lesser forms of these races" are designated by letters. The more important reductions in rank are:

43, 44, 45, 46 and 47	are made	races of	42
50	is "	" "	49
54, 55, and 56	are "	" "	53
62	is "	" "	61
70	" "	" "	69
82	" "	" "	81
109	" "	" "	108

A large number of varieties are also reduced to synonomy. These have resulted, he states, "from too much attention to the minute differences," and he adds, "I am inclined the other way." It is possible that this inclination has, at least in some instances, resulted in errors.

CARABIDÆ

Lapouge 08, 24; Jeannel 20, 27, 28; Sloane 23; Van Dyke 24, 25, 26; Bänninger 25, 28; Notman 25, 29; Blaisdell 25; Hopping 25; Fall 26, 30; Darlington 26, 30; Hatch 26, 29, 30; Csiki 27; Breuning 27, 28; Benedict 27; Liebke 27, 28, 29, 30; Blatchley 28, 30; Barber 28; Tanner 28; Lutshnik 29; Brown 30; Cooper 30; Bradley 30 *.

Trachypachus

20680. slevini Van D. 25-111 Oreg.

Pemphus

Stenocantharus Gistl. fide Csikl 27, is the older name. According to the same author 130 a, 132 a^1 are good species, and 161b is a variety of 163.

Carabus

166f. atlanticus Lapouge 24-191
St. Pierre Miquelon

175a. canadensis Lapouge 08-19
(see below) N. B.

166b. = granulatus L., fide Lapouge 24-190
According to Col. Cat. pars 91, by Csiki, our species sylvosus belongs in the subgenus Tanaocarabus Reitt. 170b is treated as a synonym, and the name lherminieri Dej. is preferred for the variety heretofore called finitimus Hald.
By the same authority serratus is placed in subgenus Hemicarabus; and limbatus and vinctus in a subgenus Lichnocarabus.

173a. georgiæ n. n. Csiki 27 for carinatus Dej.
Csiki also makes several changes under tædatus which with nemoralis he places in a section Archicarabus. These are:

169b. vancouvericus n. n. Csiki 27, for bicolor Walk.

169g. canadicus Roeschke with gladiator Heyden and canadensis Lapouge as synonyms.

Calosoma, fide Breuning 28 [see also Appendix A.]

183. in subg. *Syncalosoma*
185. etc. in subg. *Carabiosoma*
184. in subg. *Callistriga* Mots.
186. etc. in subg. *Carnegonia* Lap. l. l.
187. = 186 a
203. in subg. *Blaptosoma*
176. etc. in subg. *Callitropa*
188. = 186 a
18565. = 186 a
194b. = 186 a
195. = lecontei Csiki n. n. for lugubre ‖ Lec.
197. in subg. *Paracalosoma*
204-207 in subg. *Chrysostrigma* Kby.
204a. = 204

Calosoma

204d. stellata Csy is valid
204b. = 204d
204c. = 204d
206a. = 206
206b. = 206
18566. = 206
207a. = 207 in subg. *Tapisnothenes*
207b. = 207
18567. = 207
18568. = 207
18569. = 207

Callisthenes treated as subg. by Breuning

212. = discors subsp. schaefferi n. n. Breuning 28-80.
215. = luxatum ab. striata n. n. Breuning 28-86.

Elaphrus

231. horni Csiki 27-420 n. n. for viridis Horn
227. synonymy reversed fide Csiki 27 (*Trichelaphrus*) Semen. 26-39 includes 229 and 233 (*Elaphroterus* Semen. 95-308) includes 232 and

20681. parviceps Van D. 25-112
Alas.

Loricera Latr. 04-273
(*Lorocera* auct. et Csiki 27)

241a. considered valid by Casey is a synonym, fide Csiki 27.

241b. sieræ Van D. 25-113 Cal.

? congesta Mann. 53-121
is valid, fide Csiki 27. Alas.

Pachyteles

20682. beyeri Notm. 19-255 L. Cal.

Notiophilus

254. obscuratus n. n. Fall. 26-125 for obscurus ‖

? cribrilaterus Mots. 64-193
fide Csikl 28 N. Am.

Nebria

20683. riversi Van D. 25-115 Cal.
20684. schwarzi Van D. 25-116
Alta.
20685. piperi Van D. 25-117 Wash. B.C.
20686. meanyi Van D. 25-118 Wash.
20687. spatulata Van D. 25-119
Cal.
20688. lyelli Van D. 25-120 Cal.
20689. crassicornis Van D. 25-121
Wash.
20690. moesta Lec. 50-209 is valid, fide Fall 26-125

* Jeannel has monographed the Trechini, adding generic subdivisions; Notman has treated Pseudomorphidæ as a family; Breuning has subdivided Calosoma. On the other hand, Sloane has consolidated some tribes previously recognized, and Bradley has simplified the divisions of Pterostichini and Harpalinæ proposed by Casey. For Dr. Böving's results, based on larval studies, see Introduction.

20691. vandykei Bänninger 28-5 Wash.-Colo.

20692. paradisi Darlington 31-24 Wash.
vandykei ‖ Darlington 30-104

20693. aleuta Van D. 24-5 Alas.
Csiki, Col. Cat. 97 (1928) separates under subg. Nebriola K. Dan. 263, 264, 265, 266, and 293.
He also places bifaria as a good species, and indicates as synonyms 276b = 276a, 18598 = 285, 291 = 278?
282a is placed as a variety of 276. 18597 also as a variety of 276.
Nebria and Leistus (= Leistidius K. Dan.) are both treated as subgenera of Pelophila.

Metrius

299a. planatus Van D. 25-122 Cal.

Dyschirius

20694. criddlei Fall 25-309 Man.
20695. desertus Fall 25-310 Cal.
20696. secretus Fall 26-130 Alas.
18607. belongs in Clivina, fide Blatch. 30-46.

Clivina

20697. californica Van D. 25-124 Cal.
18607. floridæ n.n. Csiki 27 for dissimilis ‖ Blatch.

Schizogenius

20698. pygmæus Van D. 25-125 Cal.

In the tribe Scaritini, divided into subtribes Pasimachina, Ardistomina and Scaritina, Csiki 27 makes many changes, as follows:

305. laterisulcatus Sturm Cat. Kaf. 1826, p. 182 is added as synonym.
313. punctulatus Lec. nec Hald. 48-146 is added as synonym.
? missuricus Gistl. 1820 Neue wirbellose Tiere 1857-27 Mo.
316. added synonyms: spinipes Sulz. and subterreus Bon.
317. added synonyms: distinctus Hald., ephialtes Lec., intermedius Lec.
? Scarites gagates Bon. Mem. Acad. Turin 1813, p. 475 N. Am.
? Scarites glabratus Bon. Mem. Acad. Turin 1813, p. 467. Am.
? Clivina brevicollis Putz. 66-155 ? Am.
367. cf. 18606 and contracta Fourcroy Ent. Paris 1885, p. 50.
18605. belongs in Clivina

Some of these, at least, may require further investigation.

Nomius

This genus, also Psydrus and Morion, are placed in the tribe Pterostichini by Bradley, following Sloane 23. The change is doubtfully recorded, though adopted also by Csiki.

Asaphidion

20699. flavipes L. 61-750, fide Notman 29-177; and Cooper 30-21 L. I.

Bembidion

20700. lachnophoroides Darlington 26-34 Alta.
20701. vandykei Csiki 28-163 coerulescens ‖ Van D. 25-65 Cal.
20702. utahensis Van D. 25-66 Ut.
20703. weesi Hatch, 30-11 Okla.
20704. yukonum Fall 26-131 Yukon
20705. mckinleyi Fall 26-132 Alas.
20706. concurrens Fall 26-134 Alas.
20707. picipes ‡ auct. = plagiatum Zimm., fide Fall 26-133
686, viridicolle has precedence
624 is not a synonym of 641, fide Blais. 25-79
756 = 767 ? Fall 26-133 (*Peryphus*)
20708. mackinacensis Hatch 29-135 Mich.
intermedium ‡ auct. = rapidum Lec., fide Fall 26-133
rupicola Kby. is valid, fide Fall 26-133
lucidum Lec. = rupicola Kby., fide Fall. 26-133
grapi ‡ N. Am. auct. = picipes Kby., fide Fall 26-133
(*Parabracteon* Notman 29-157)
20709. tuberculatum Notman 29-157 Mich.
Csiki 28 introduces new subgenera as follows:
Chrysobracton Net. 14-166 for 408-419.
Eurytrachelus Mots. 50-15 " 438, 439, 18616
Plataphodes Ganglb. 92-52 " 503 and ventricosum Mots. 50-11 Alas.
Trepanedoris politum Mots. 45-29 Cal.
Csiki also records new names as follows:
752. reliquum n. n. Csiki 28 for relictum Csy.
755. roosvelti Pic 02-71 n. n. for perconcinnum Blais.

Tachys

Csiki 28 submerges under this name all the genera into which Casey divided the old genus. The following new names for preoccupied names result in part from this course:
813. unionis n. n. Csiki for laetifica Csy. nec Bates
847. latalatus n. n. Csiki for latipennis Hayw. nec. Sharp

Tachys

852. pallidiusculus n. n. Csiki for pallescens Csy. nec Bates
881. uniostriolatus n. n. Csiki for unistriatus Csy. nec Putz. nec Reitt.
887. trechoides n. n. Csiki for trechiformis Hayw. nec Jordan.

Patroboidea Van D. 25-67
20710. rufa Van D. 25-67 Wash.

Diplous Mots. Kaf. Russl. 1850, p. 10.
(*Platidius* Chaud.) fide Csiki 28

Trechus *
910. chalybæus Dej.
californicus Mots.
tahoensis Csy.
910a. utahensis Schffr.
20711. coloradensis Schffr. 15-48
? saxatilis Csy.
909. apicalis Mots. Kamchatka
909a. micans Lec.
fulvus Lec. nec Dej.
rubens Horn nec Fab.
borealis Schffr.
puritanus Csy.
brumalis Csy.
rhodensis Csy.
pallescens Csy.
909b. canadensis Putz. 71-160 Nfld.-Can.
911. ovipennis Mots.
lævigatus Lec.
20712. conformis Jeannel 27-188 Cal.
912. pomonæ Fall.
914. arizonæ Schffr.
915. hydropicus Horn
omit flavipes Kby. = 2171
913. carolinæ Schffr.
20713. vandykei n. n. Jeannel 28-791
ruficollis ‖ Van D. 26-66

Microtrechus Jeannel 27-585
20714. vandykei Jeannel 27-587 N. C.

Neaphaenops Jeannel 20-154
918. tellkampfi Er.

Pseudanophthalmus Jeannel 20-154
920. menetriesi Mots.
ventricosus Mots.
angulatus Lec.
919. striatus Mots.
interstitialis Hubb.
923. pubescens Horn
924. audax Horn
925. horni Garman
922. pusio Horn

20715. hubbardi Barber 28-196 Va.

Pseudanophthalmus Jeannel 20-154
20716. engelhardti Barber 28-195 Tenn.
921. eremita Horn
tenuis Horn
20717. barberi Jeannel 28-132 Ky.

Myas
(? = *Trigonognatha* Mots. 57-25, fide Bradley 30-26 and Csiki.)

Pterostichus **
945. cf. Van D. 25-69
20718. nigrocæruleus Van D. 25-70 Wash.-Cal.
20719. beyeri Van D. 25-71 Mont.
20720. falli Van D. 25-73 Cal.
20721. termitiforms Van D. 25-74 Oreg.
20722. lanei Van D. 25-76 Wash.
20723. rufofemoralis Van D. 26-113 Alas.
20724. pacificus Van D. 26-114 Wash.
937. is placed in subg. Peryphes.
957. algidus Lec. is valid.
964. lecontellus n. n. for longulus Lec. nec Reiche.
991. contractus Lec. is valid, castanipes ‖ Mén. nec Kby.
1006. rejectus Lec (1005) is a synonym.
1010. idahoe n. n. for elongatus Schffr. nec Duft. nec Chaud.
1017. oregonis n. n. for longicollis Lec. nec Duft.
1018. fugiens n. n. for fugax Csy. nec Moraw.
1020. fenyesi n. n. for ovicollis Schffr. nec Mots. nec Reitt.
Under Anaferonia Csiki adds evanescens Csy. 18-343.
It occurs in Mexico not U. S.
Fortax Mots. antedates Ferestria Leng.
1082. dejeanellus n. n. for morio Dej. nec Duft.
1110. sayanus n. n. for obscura Say nec Dej.
1114a. aleutorum Lut. 14-427 n.n. for brevicollis Tsch. nec Lec.
1116. synonymy reversed and var. rugifer Tsch. added.
1117. globicollis n. n. for rotundicollis Mann. nec Duft.
1124. frigidus Dej. is valid sp.
1126. fusco-aeneus Chd. is valid sp. fatuus is syn.
1143. ochoticus and arcticus Sahlb. are syn.

* The arrangement of the species heretofore placed in Trechus and Anophthalmus follows the work of Jeannel; he has separated them from the Pogonini, and has treated them as a subfamily. Dr. Böving also separates them from Pogonini, but as a tribe of subfamily Bembidiinæ.

** The treatment of Pterostichus by Csiki 30 submerges the allied genera of our American catalogues as subgenera or as sections of Pterostichus s. str. A number of specific names are thus brought into conflict. The changes given above are therefore proposed by Csiki; many of them, however, will be unnecessary if our generic divisions are retained.

Pterostichus

According to Csiki:

1149. caseyi n. n. for breviusculus Csy. nec Sahlb.

In Cryobius and elsewhere the species described by Motschulsky and other authors, heretofore unrecognized are treated as valid, except the following:

texicola n.n.
for texanus Mots. nec Lec.

1152. is syn. of diplophyrus Chd. 76-42
1156. add atratus Lec. 63-140 to synonymy.
1157. add connexus Chd. 76-44 to synonymy.
1161. add cupreonitens Sturm. 43-23 to synonymy.
1163. coloradensis n. n. for bicolor Lec. nec Arragona.
1168. substrenuus n.n. for strenuus Lec. nec Panz.
1173. is placed in subg. Metamelanius
1174. to 1176 are placed in subg. Melanius
1177. ohionis n. n. for purpuratus Lec. nec Herr.
1181. is in subg. Pseudargutor and is called leconteianum Lut. which name is elsewhere cited as synonym of nitidus Kby.
1182. to 1187 are placed in subg. Americomaseus n. n. 1930 for Micromaseus Csy. nec Desbr. apparently conflicting with Omaseulus Lut. published 1929.

Anilloferonia Van D. 26-115

20725. testacea Van D. 26-116 Wash.

Evarthrus

20726. carolinensis Csiki 30
montanus || Van D. 26-116
nec Mots N. C.

20727. lodingi Van D. 26-118 Ala.

1075a. alabamæ Van D. 26-118 Ala.

Omaseulus n.n. Lutshnik 29-5

(*Micromaseus* || Csy. nec Desbr.)

Bothriopterus

According to Csiki:

20729. commixtus Chd. 50-135 Alas.

Platysmatus Lutshnik 29-5

(= *Pseudargutor* Csy. *Pseudolagarus* Lut.)

1181. nitidum Kby., type leconteianum Lut. and erythropus Dej. are synonyms of 1181.

Loxandrus

1230. blatchleyi n. n. Csiki for brunneus Blatch. nec Sloane

Oxycrepis Reiche 43-78

(*Stolonis* Mots. 65-230 fide Csiki)

Curtonotus

20730. consueta Fall. 26-135 Alas.

20731. imperfectus Brown 30-232 Que.

The following new names are proposed by Csiki, who treats Celia, Acrodon, Bradytus, Curtonotus, Triæna, etc., as subgenera of Amara:

1415. lecontei n. n. for polita Lec. nec Chd.
1424. haywardi n. n. for parviceps Hayw. nec Putz.
1426. americana n. n. for brunnipes Mots. nec Letzn.
1327. horni n. n. for femoralis Horn. nec Dej. nec Letzn.
1350. subænescens n. n. for sublævis Lec. nec Sturm nec Steph.

20732. jucunda n. n. for impunctata Putz. 67-170 nec Letzn. U. S.

20733. purpurascens Mots. 59-152 Cal.

1335. is syn. of brunnea Gyll. and belongs in subg. Acrodon.
1270. putzeysiana n. n. for putzeysi Horn nec Fairm.
18720. maxwelli changed to maxwellianus
1249. is synonym of 1250

Curtonotus is spelled Cyrtonotus by Csiki.

A number of heretofore unrecognized names are treated as valid and some changes in synonymy are made; also

alaskana n. n. is proposed for angustata Sahlb.

Zezea Csiki n.n.

(*Triæna* || Lec. nec Hubner)

Rembus

20734. angusticollis Blatch 28-61 Fla.

Rhadine

20735. longicollis Benedict 27-44 N. Mex.

Platynus

20736. prognathus Van D. 26-119 Ga.

(*Anchomenus*)

1523. ab. syracusensis Hatch 26-247 N. Y.

Colpodes

20737. rufiventris Van D. 26-120 Ariz.

Anchonoderus

1607. schaefferi n. n. Liebke 28-128
unicolor || Schffr. nec Chaud.

Colliurus Latr. 17-179 *

(*Casnonia* Latr. 22-77)
(*Odacanthella* Liebke 30-658, type 1612)

1612b. suturalis Chaud. is valid, fide Liebke
1613 and 1614 also belong here.

Galerita

1620b. ahasverus n. n. Liebke 29-297
intermedia || Csy. nec Fairm.
caseyi || Liebke 28-129

Pseudaptinus

20738. oviceps Van D. 26-121 Cal.

Thalpius

20739. microcephalus Van D. 26-122 Cal.

Axinopalpus

20740. utahensis Tanner 28-270 Ut.

Cymindis

19027. tarda n. n. Liebke 27-104
sinuata || Csy. nec Reiche

19028. caseyi n. n. Liebke 27-104
alternans || Csy. nec Ramb.

Zacotus

20741. subopacus R. Hopping 25-206 B. C.

Harpalus

20742. pacificus Fall 26-136 Alas.

20743. washingtoniensis Van D. 26-123 Wash.

20744. martini Van D. 26-124 Cal.

Dicheirus

20745. blaisdelli Van D. 26-125 Cal.

Tachycellus

(*Triliarthrus* Csy. based upon inconsequential differences, fide Fall 30-251)

20746. frosti Fall 30-251 Mass.

20747. tibialis Kby. is distinct, fide Fall 30-251 Mass. E. Can.

2161 differs little from 2159
2165 differs little from 2164
2166 is a Stenocellus, fide Fall 30-252

PSEUDOMORPHIDÆ

Newman 40, Horn 67, Notman 25

Pseudomorpha

20748. falli[1] Notman 25-15 So. Cal.

20749. hubbardi Notman 25-15 Ariz.

20750. tenebroides[1] Notman 25-16 Ariz.

20751. alutacea[1] Notman 25-17 N. Mex.

20752. vicina Notman 25-17 So.Cal.Nev.

20753. vandykei[1] Notman 25-18 Ariz.

Pseudomorpha

20754. consanguinea Notman 25-18 So. Cal. Ariz.

20755. vindicata[1] Notman 25-19 Ut.

20756. champlaini Notman 25-20 Ariz. Cal.

20757. schwarzi[1] Notman 25-21 Ariz.

OMOPHRONIDÆ

This family is treated by Csiki 27 as a tribe Omophronini with following synonymy: 2284c (= 2284d), 2293 (= sonoræ Csy. 97-304), 2285 (= 2286, 2291, 2292), 2295 (= 2296). The family is recognized by Dr. Böving.

AMPHIZOIDÆ

Amphizoa

2281. lecontei Matth.
planata Van D. 27-98
and 27-197 Alta.

20758. striata Van D. 27-197 Wash.

HALIPLIDÆ

Brychius

20759. albertanus Carr 28-23 Alta.

20760. pacificus Carr 28-24 Cal.

Haliplus

cf. subg. *Paraliaphlus* Guignot 30-74 for H. triopsis Aubé.

Peltodytes

2332. is valid, fide Blatch. 30-38.

* A rearrangement of the genera heretofore included in Anchonoderini, Odacanthini and Egini is proposed by Sloane 23 and is apparently adopted in Bradley's Manual. Dr. Böving's work on the larvæ may require revision of their results.

NOTERIDÆ

The genera Noterus, Hydrocanthus, and Canthydrus, the larvæ of which have fossorial legs, are placed in the family Noteridæ by Dr. Böving.

Canthydrus

20761. floridanus is valid, fide Blatch. 30-38.

Hydrocanthus

20762. similator Zimm. 28-165 Cal. Mass.

DYTISCIDÆ

Blatchley 25; Fall 26, 27, 28; Wallis 26; Hatch 28; Gellermann 28; Darlington 28; Zimmermann 28; Brown 30; Carr 30; Bradley 30.*

Bidessus

2390e. microreticulatus Hatch 28-219 Mich.Wash.

Coelambus

20763. borealis Fall. 26-137 Alas.
20764. dentiger Fall 27-136 Alta.
20765. bruesi Fall 28-64 Nev.
20766. columbianus Brown 30-87 B. C.
20767. quebencensis Brown 30-234 Que.
20768. thermarum Darlington 28-1 Nev.
2407a. winnipeg Wallis 26-90 Man.
2424a. lineellus Gellermann 28-64 Wash.

Hydroporus

20769. yukonensis Fall 26-138 Yukon
20770. alaskanus Fall 26-139 Alas.
20771. recticollis Fall 26-140 Alas.
20772. falli Blatch. 25-162 Fla.
20773. uniformis Blatch. 25-162 Fla.
20774. brumalis Brown 30-235 Que.
20775. brodei Gellermann 28-63 Wash.

(*Oreodytes*)

20776. rainieri Hatch 28-220 Wash.
20777. kincaidi Hatch 28-221 Wash.
19201b. angustior Hatch 28-221 Wash.

Agabus

20778. kenaiensis Fall 26-141 Alas.
20779. gelidus Fall 26-142 Alas.
20780. smithi Brown 30-88 B. C.
20781. bryanti Carr 30-278 Yukon
20782. pseudoconfertus Wallis 26-90 Man.
20783. palustris Wallis 26-92 Man. (*Gaurodytes*)
20784. ilybiiformis Zimm. 28-176 Cal.

Ilybius

20785. incarinatus Zimm. 28-181 Ill.
2592. validity doubtful Fall 27-281
2599. validity doubtful Fall 27-281
2598. = fenestralis Say Fall 27-281

Rhantus

20786. hubbelli Hatch 28-222 Okla.
2616a. ab. immaculatus Hatch 28-223 Alas.

Graphoderes

2661. = zonatus Hope 95-33, fide Hatch 28-229.
2662. = 2661, fide Hatch 28-229

GYRINIDÆ

Wallis 26; Ochs 27, 29; Chamberlin 29; Blatchley 30; Hatch 26, 27, 29.

Dineutus (= Dineutes)

2680. = assimilis Kby (americanus ‖), fide Ochs 27-39
20787. amazonicus[1] Hatch 30-16 Ark.
2671 = ciliatus Forsberg 21-312 fide Hatch 30-17

Gyrinus

20788. hatchi Wallis 26-93 Mich.

Gyrinus

20789. dubius Wallis 26-93 Nfld.
20790. gehringi Chamberlain 29-247 N. H.
2697. is a good species fide Wallis 26-50, disputing synonymy stated in first Suppl.
2698. cf. Zimm. 26-97

* Bradley's Manual, following Zimmermann, makes some changes in classification by which Vatellinæ and Cybistrinæ are reduced to tribes, Agabetini and Coptotomini are combined respectively with Copelatini and Colymbetini, and the tribal name Celinini is altered to Methlini. The results of Dr. Böving's studies differ.

HELOPHORIDÆ *

Helophorus
20791. aquaticus L. 61-461, fide Darlington 27-174 Me. Mass.

Helophorus
20792. needhami D'Orch. 29-79 N. Y.
2746. linearis Lec.
pallens Csy., syn. fide D'Orch. 29-89

HYDROCHIDÆ *

Hydrochus
20793. equicarinatus Blatch. 28-62 Fla.

Hydrochus
20794. currani Brown 29-108 Ont.

HYDROPHILIDÆ *

Fall 26, 30; Winters 26, 27; Darlington 27; Blatchley 28; D'Orchymont 28, 29; Brown 29.

Hydrophilus
In the 1920 catalogue, 2789, 2790, 2791 were placed in Hydrous, following Zimmermann. The researches of Mr. Mutchler indicate that this was an error. See 3rd Supplement.

Tropisternus
20795. mexicanus Cast. 40-54 fide Hatch 30-22 Okla.
20796. quadristriatus Horn ls valid, fide Fall 30-238 Mass. (Ga.?)
2802. sublaevis Lec. Neb.

Hydrobius
2810. synonymy should be reversed, fide Winters 26.

Sperchopsis
genus valid, fide D'Orch. Cat. Indian Ins. 28-93
cf. Hydrocyclus Sharp, fide Winters 26

Crenitulus Winters 26-54
2817 type

Anacaena
2814. = limbata Fab. 92-82 fide Winters 26.
19269. = bipustulatus Marsh., denied by Fall i. litt.
20797. globulus Payk. 98-188 fide Winters 26 Conn.

Enochrus
19274. sublongus Fall. n. n. 26-125. elongatulus ‖ Fall 24-85
2839. = sellæ Sharp 82-75, fide Winters 27-24
20798. nigrellus Sharp 82-68 fide Winters 27-24 Cal.

Helobata
2856. = striata Brulle 38-58, fide Winters 27-25

BRATHINIDÆ

The genus Brathinus, following Casey is associated with Omaliinæ by Bradley 30-64; Forbes 26-67 and 26-113 found resemblance in wing folding to Scaphidiidæ and retained the family name. The larva is still unknown.

* According to larval characters, Helophorus and Hydrochus must be ranked as families of Hydrophiloidea. By the larval characters also, Limnebius, Ochthebius and Hydræna are removed from Hydrophilidæ to form a family Limnebiidæ in Staphylinoidea.

SILPHIDÆ *

Portevin 24, 25, 26; Hatch 25, 27, 29; Fall 25-26-27; Van Dyke 28; Brown 28, 30; Bradley 30.

Hatch 27, p. 341 following Portevin, defines subspecific variations as follows:

1. correlated with geographical distribution = subspecies;
2. variations in color pattern = aberration;
3. variation in sculpture and color of pubescence = variety;
4. variation in the general pigmentation of the exoskeleton = accident.

The use of the term "aberration" in this restricted sense, is not in accord with the older dictionaries, but may come to be generally accepted. We have not numbered the names thus designated by their authors.

Nicrophorus (= *Necrophorus*)
(*Necrocharis* Port. 23-68)

2909. carolinus L.
ab. floridæ Hatch 27-364 N. C. Fla.
ab. krautwurmi Hatch 27-364 Fla.
ab. lunulatus Hatch 27-364 N. Mex.
ab. nebraskæ Hatch 27-364 Neb. Kan.
2909a, 2909b, and 2910 are only aberrations
(*Nicrophorus* s. str.)

2914. marginatus Fab.
ab. sanjuanæ Hatch 27-362 Colo. Wis. N. Y.
ab. engelhardti Hatch 27-362 So. Cal.
ab. leachi Hatch 27-362 Cal.
ab. cordiger Port. 24-84 N. Y. Ark.

20799. hybridus Hatch and Angell 25-216 Man.-N. J.
var. minnesotianus[1] Hatch 27-5 Minn.

2915. obscurus Kby.
ab. discontinuus Hatch 27-362 Ut.
ab. ruber Hatch 27-362 Oreg. Wis.

2916. guttulus Mots.
ab. punctatus Hatch 27-360 Cal.
ab. shastæ Hatch 27-360 Cal.
ab. hypomeruş Hatch 27-361 Cal.
ab. sanfranciscæ Hatch 27-361 Cal.
ab. kuschel Hatch 27-361 Cal.
ab. lajollæ Hatch 27-361 Cal.

Nicrophorus
2916b and 2916c reduced to aberrations

2916a. hecate Bland
ab. wallisi Hatch 27-361 B.C.-N.Mex.
ab. californiæ Hatch 27-361 Cal.
ab. intermedius Hatch 27-361 (Angell i. litt.) Oreg. Nev.
ab. disjunctus Port. 24-85
ab. woodgatei Hatch 27-361 N.Mex.Colo.
ab. phoenix Hatch 27-361 Ariz.-Colo.
ab. novamexicæ Hatch 27-361 N.Mex.-Cal.
ab. rubripennis Port. 24-85 N.Mex.-Cal.
ab. rubrissimus Hatch 27-362 Colo.
ab. immaculosis Hatch 27-362 Cal.

2917. = germanicus L. ab. bipunctatus Kr., fide Hatch 27-355

2918. pustulatus Hersch.
ab. coloradensis Hatch 27-359 Colo.
ab. noveboracensis Hatch 27-359 N. Y.
ab. fasciatus Port. 24-86 Que.-Fla.
ab. unicolor Port. 24-87 La.

2918b. investigator Zett. subsp. nigritus Mann. var. ruficornis Mots. Bull. Mosc., JLII. 1869-352 Cal.

2918c. investigator Zett.
subsp. maritimus Guér.
Icon. Regne. Anim. 1829, p. 60. Japan-B.C.
melshelmeri Kby.
ab. martini Hatch 27-358 B. C.

* As restricted by Hatch, this family includes only the tribes Lyrosomini, Agyrtini, Pinodytini (name changed to Catopocerini), and Silphini of the 1920 catalogue. The other tribes form a new family Leiodidæ, the separation of which is apparently supported by Dr. Forbes' studies of wing venation and folding, and adopted in Bradley's Manual. The composition of these families may suffer changes; they are here treated in accordance with the literature cited.

Nicrophorus

ab. clarencei Hatch 27-358
B. C.
ab. sitkenensis Hatch 27-358
Sitka, B. C.
ab. massetti Hatch 27-358
B. C.
ab. grahami Hatch 27-358
B. C.
ab. charlottei Hatch 27-358
B. C.
ab. particeps Fisch.
Bull. Mosc. XVII, 1844, p. 139.
Sitka, B. C.
var. variolosus Port. 24-149
?
ab. intermedius Reitt. 95-327
B.C.-N.Mex.
ab. jamezi Hatch 27-358
N. Mex.
Mont.
ab. lutescens Port. 24-150
Ariz.N.Mex.

2919b. defodiens Mann.
pygmæus Kby. and hebes Kby.
ab. humeralis Hatch 27-7
N. J.-Alb.
ab. ruber Hatch 27-356 Mich.
ab. nicolayi Hatch 27-356
N. B. Me.
ab. oregonensis Hatch 27-356
Oreg.
ab. nunenmacheri Hatch 27-356
B. C. Cal.
ab. binotatus Port. 26-236
Cal.
ab. lateralis Port. 03-330
Wash. Cal.
ab. pacificæ Hatch 27-356
Cal.
ab. gaigei Hatch 27-356
Wash.Oreg.
ab. conversator Walk. Cal. Oreg.
ab. kadjakensis Port. 26-236
Alas.
ab. mannerheimi Port. 24-293
Cal.

2920. tomentosus Web.
ab. communis Hatch 27-363
L. I.
ab. elongatus Hatch 27-363
Colo.
ab. angustefasciatus Port. 25-165-170 ?
ab. splendens Hatch 27-363
Ariz.
ab. brevis Hatch. 27-363
Man.
var. aurigaster Port. 25-165
?

20800. vespillo L. 58-359
fide Hatch 27-363 quoting Portevin
Neb. Penn.

Silpha *

(*Philas* Port. a subgenus, fide Hatch 27-344)
includes 2921
(*Necrodes* Leach a subgenus including *Protonecrodes* Port.)
includes 2922 and ? ab. bizonatus Port. from So. Cal.
(*Thanatophilus* a subgenus credited to Samouelle by Hatch 27)
includes 2923, 2924, 2925

2923a. caudata Say, valid fide Hatch
Cal.
(*Oiceoptoma* Leach a subgenus fide Hatch)
includes 2926, 2927

2926a. rugulosa Port. Ga. Fla.
acc. bicolorata Hatch 27-343
N. Y. N. J.
(*Blitophaga* Reitt. a subgenus fide Hatch)
includes 2930, 2931
(*Heterosilpha* Port. 26-83)
includes 2929

20801. ænescens Csy. valid
fide Hatch 27-344 Cal.
(*Necrophila* Kby. including *Necrobora* Port. 26-86)
includes 2928

2928a. affinis Kby.
acc. brunnipennis Hatch 27-344
Md.
(*Oxelytrum Gistel*)

? discicollis Br, a single specimen from So. Cal.

Apteroloma Hatch 27-12
type 2936

Pteroloma **

20802. tahoeca Fall 27-136 Cal.
20803. arizonica Van D. 28-24
Ariz.

* Two specimens of S. tyrolensis Laich. ab. nigrita Creutz labeled "Ka." are mentioned by Hatch 27-345.

** This genus, fide Van Dyke 28-19, belongs in the tribe Lyrosomini; but is placed by many authors in Omaliinæ.

LEIODIDÆ **

Hatch 27, 29; Bradley 30.

Hydnobius
20804. luggeri Hatch 27-18 Alas.

Anogdus
20805. luggeri Hatch 27-17 Minn.

Leiodes Latr.
(*Anisotoma* of 1920 Cat.)
20806. canadensis Brown 28-141 Sask. Man.
20807. oklahomensis[1] Brown 28-142 Okla.
(*Ecarinosphaerula* Hatch 29-2) type 3011

Anisotoma
(*Leiodes* of 1920 Cat.)
(*Orcosphaerula* Ganglb. 99-209) includes 3025, 3010 and
20808. puritana Fall 25-310 Mass.
20809. fusciclava Fall 25-311 Cal.

Agathidium
20810. maculosum Brown 28-145 B. C.
20811. canadensis Brown 30-89 B. C.

Dissochaetus Reitt. 84-39
2963. oblitus Lec.
2955 = Sciodrepa fumatus Spence, fide Hatch 27-15

SCYDMÆNIDÆ

Euconnus
20812. longiceps Fall 26-144 Alas.

Scydmænus
20813. adjutor Fall 26-144 Alas.

ORTHOPERIDÆ

Corylophodes
20814. flavo-ocellus Blatch. 27-139 Fla.

Orthoperus
6476 belongs here, fide Leng 26-285
20815. æneocollis Blatch. 27-139 Fla.

STAPHYLINIDÆ

Benick 21, 25, 28; Van Dyke 24; Notman 25; Jacobs 25; Mann 25; Fall 26, 30; Wendeler 27, 28; Chapin 28; Bernhauer 28; Hellén 28; Chamberlin and Ferris 29; Hatch and Ortenburger 30.

Holotrochus
20816. parvulus Chapin 28-66 La.
20817. arizonicus Chapin 28-66 Ariz.

Thoracophorus
20818. fletcheri Wendeler 27-5 N. Y.

Anthobium
20819. frosti Bernh. 28-40 Cal.

Geodromicus
20820. rufipennis[1] Van D. 24-16 Alas.

Trogophloeus
20821. alaskanus Fall 26-146 Alas.
20822. teres Fall 26-146 Alas.

Bledius
3623. falli Wendeler 28-298 = philadelphicus Fall

** The species following 2942 are here included. They are divided by Hatch into subfamilies Catopinæ (2945-2969), Coloninæ (2970-2984), Bathyciinæ (2943-2944), and Leiodinæ (= Anisotominæ). The last named is divided into tribes Leiodini (2985-3014), and Agathidiini (3015-3045). Catops replaces Choleva, Leiodes and Anisotoma are interchanged. Further changes are made by Hatch in 1933, too late for inclusion.

Osorius
20823. parviceps Notman 25-12 Fla.
20824. brevipennis Notman 25-14 Ariz.
20825. variolatus Notman 25-17 Ariz.
20826. difficilis Notman 25-17 Ariz.

Stenus
3731. = difficilis Csy., fide Benick 21-192 tenuis ‖ Csy. nec Rey.
3744. tricuspidatus Benick 21-192 simplex ‖ Csy. nec Rey
20827. biguttatus L. 61-851 fide Benick 25-73 Tenn.
20828. exasperatus Benick 25-73 Mont. B.C.
20829. torus[1] Benick 25-80 Id.
20830. gibbicollis Sahlb. 80-80 fide Benick 25-77 Wash.
20831. limatulus Benick 28-50 Va.
20832. personatus Benick 28-52 N. C.
20833. frigidus Fall 26-59 Alas.
20834. exploratus Fall 26-61 Alas.
3770a. atomarius Csy., valid fide Benick 25-75
3782. mammops Csy., valid fide Benick 25-78
3795. ageus Csy., valid fide Benick 25-78
3837. reconditus Csy., valid fide Benick 25-80

Dianous
3857. chalybæus Lec., valid fide Benick

Euæsthetus
20835. pacificus Fall 26-62 Alas.
20836. subviridipennis Bernh. 28-38 Mass.
20837. marionensis Bernh. 28-40 Mass.
20838. ganglbaueri Bernh. 28-39 Mich.

Lathrobium
20839. sollicitum Fall 26-147 Alas.
20840. sewardi Fall 26-148 Alas.

Astenus
20841. fletcheri Wendeler 27-6 N. Y.

Philonthus
20842. septentrionis Fall 26-149 Yukon
20843. fraternus Fall 26-149 Yukon
20844. ovaliceps Fall 30-253 N. H. Mass. Va.
20845. bernardensis Fall 30-253 So. Cal.
20846. oklahomensis[1] Hatch 30-12 Okla.

Diaulota
(= *Amblopusa* Csy. fide Chamberlin and Ferris 29-155)

Acrotona
5534 belongs here, fide Hellén 28-13, with 5626 as synonym

Cordalia n.n. Jacobs 25-82
(*Cardiola* ‖ Rey. nec Broderip.)

Acamatoxenus Mann 25-76 (to follow Myllæna ?)
20847. suavis Mann 25-76 So. Cal.

PSELAPHIDÆ

Batrisodes
6217. author should be Blatch. 10-326

Rybaxis
20848. obliquedens Fall 27-222 Pa.

Rybaxis
20849. geminata Fall 27-225 Pa.
20850. transversa Fall 27-223 Mass.
20851. arkansana Fall 27-226 Ark.

GNOSTIDÆ

Gnostus Westw. 55-90
20852. floridanus Blatch. 30-111 Fla.

PTILIIDÆ

Ptenidium
20853. californicus Psota and Ray 29-119 Cal.

Nephanes
20854. rugulodorsus Hatch 27-265 Ia.

SPHÆRIIDÆ

6476 belongs in Orthoperus

HISTERIDÆ

Hatch 26, 29; Brown 28.

Hister

6571a. albertensis Hatch 26-275 Alta.
6571b. carri Hatch 26-276 Alta.
19437 = subsp. of 6571, fide Hatch 29-76
20855. jaquesi Hatch 29-76 Ia.
20856. lævicaudoides Hatch 29-77 Kan.

Psiloscelis

20857. carri Hatch 26-273 Alta.

Hetærius

20858. carri Hatch 26-276 Alta.

Saprinus

20859. cynomysi Brown 28-89 Okla.
20860. carri Hatch 26-272 Alta.-Colo.
6827. ab. oregonensoides Hatch 29-78 Cal.
ab. distenguendoides Hatch 29-78 Mich.
ab. sejunctoides Hatch 29-78 Ia.

Saprinus

6831. ab. pseudosejunctoides Hatch 29-78 Cal.
ab. pseudosejunctus Hatch 29-78 Wash.
ab. leconteoides Hatch 29-78 Colo.
6831a and 6831c reduced to aberrations
6829. ab. profusoides Hatch 29-79 Mich.-Ohio
6830 reduced to aberration
6836. ab. semisulcus Hatch 29-79 Mich. O. La.
(*Hypocaccus* Thoms.)
20861. eriensis Hatch 29-80 Mich. Ohio
20862. ontarioensis Hatch 29-80 Ont.
20863. ohioensis Hatch 29-80 Mich.
20864. michiganensis Hatch 29-80 Mich.
20865. jaquesi Hatch 29-81 Iowa
20866. propensoides Hatch 29-81 Cal.
(*Pachylopus Er.*)
6901. palmatus Say
ab. dimidiatipennis Lec, fide Hatch

LYCIDÆ

Plateros

20867. columbiensis Brown 29-108 B. C.

Plateros

6944. ab. humeralis Hatch 30-23 Okla.

LAMPYRIDÆ

Photinus

20868. ignitus Fall 27-208 Mass. N. Y. Pa.
20869. ablucens Fall 27-209 Ill.
20870. granulatus Fall 27-209 Kan.
20871. stellaris Fall 27-210 Tex.
20872. floridanus Fall 27-210 Fla.

Photinus

7004. (7007 is synonym)
7005. (7008 is synonym)

Photuris

20873. flavicollis Fall 27-210 Tex.

PHENGODIDÆ

Pic in Junk Col. Cat. excludes from this family all the species of Omethini and of Mastinocerini except those in the genera Cenophengus and Mastinocerus.

CANTHARIDÆ

Fall 26, 28, 30; Blatchley; Hopping 29.

Chauliognathus
20874. omissus Fall 30-254 Ariz.N.Mex.
Podabrus
20875. conspiratus Fall 26-152 and 28-76 Alas.
20876. tetragonoderus Fall 26-152 Alas.
20877. fissilis Fall 26-152 B. C. Alas.
20878. ambiguus Fall 28-73 Cal.
20879. appendiculatus Fall 28-74 Ct. Mass.
20880. knobeli Fall 28-75 Ark.
20881. illex Fall 28-76 Cal.
20882. limatus Fall 28-78 Cal.
20883. brevicollis Fall 28-79 N.Y.Pa.R.I.
20884. longicornis[1] Fall 28-82 N. H.
20885. confraternus Fall 28-84 Cal.
20886. sierræ Fall 28-84 C. I.
20887. viduus Fall 28-85 Cal.
20888. fulvus Fall 28-85 Cal.
20889. tenuis Fall[1] 28-85 Cal.
20890. muliebris Fall 28-86 N. Mex.
20891. occipitalis[1] Fall 28-87 Cal.
20892. modulatus Fall 28-88 Cal.
20893. extricatus Fall 28-88 Cal.
20894. excursus Fall 28-91 B. C. Mont.
20895. obscurevittatus Fall 28-95 Alta.
20896. gracilis Fall 28-96 Cal.
20897. instabilis Fall 28-97 Cal.
Podabrus
20898. mœstus Fall 28-97 Cal.
20899. altus Fall 28-98 Cal.
20900. fenestratus Fall 28-99 Cal.
20901. probus[1] Fall 28-100 N. H.
20902. citrinus[1] Fall 28-100 Cal.
20903. heteronychus Fall 28-101 Man. Alas.
20904. furtivus[1] Fall 28-102 Colo.
20905. pruinosus Lec., valid fide Fall 28-77 Cal.
20905a. diversipes Fall 28-77 Cal.
20906. flavicollis Lec. (7062a.), valid fide Fall 28-81
basillaris Lec. = discoideus Lec. fide Fall 28-81.
20907. punctulatus Lec. (7058b.) valid fide Fall 28-80
7076 = 7089
20908. mexicanus Gorh. 85-284 Ariz.
20909. falli Hopping 29-252 B.C.
Cantharis
7100. mandibularis Kby. (= nigritulus Lec.) fide Fall 26
20910. degener Blatch. 28-62 Fla.
19485. = ? livida L. 58-647
Polemius
20911. suturalis Blatch. 28-63 Fla.

MELYRIDÆ

Blaisdell 25, 26, 27, 28, 29, 30; Hopping 25; Hatch 27; Brown 28; Tanner 28; Martin 29; Fall 30.

Collops
20912. oklahomensis Brown 28-145 Okla.
Hoppingiana
20913. kingi Brown 28-147 Alta.
Temnopsophus
7231. ab. quadrimaculatus Hatch 27-366
ab. estelle Hatch 27-366
Malachius
20914. floricola Martin 29-174 Cal.
20915. criddlei Brown 28-146 Man.
Tanaops
20916. basalis Brown 28-147 B. C.
Microlipus
20917. falli R. Hopp. 25-206 B. C.
Pseudebæus
7279. ab. nigroapicalis Hatch 27-367
Trichochrous
20918. kernensis Blais. 26-9 Cal.
20919. reticulicollis Blais. 26-10 Cal.
20920. vicinus Blais. 26-11 Cal.
20921. muiri Blais. 27-165 Cal.
20922. albertensis Blais. 27-50 Alta.
20923. fieldi Blais. 27-51 Cal.
20924. quadrinotatus Blais. 30-14 Cal.
20925. conformis Lec., valid fide Blais. 27-49
20926. zionicus Tanner 28-272 Ut.
Listrus
20927. medicatus Blais. 27-52 Alta.
20928. longicornis Blais. 28-35 Cal.

Listrus

20929. pictipes Blais. 28-37 Cal.
20930. falli Blais. 28-39 Cal.
20931. lanei Blais. 28-40 Wash.
7435 = 7429, fide Blais. 25-79

Dasytes

20932. irregularis Blais. 25-184 Cal.
20933. subæneus Blais. 26-12 Cal.

Allonyx

20934. cinerescens Fall 30-254 So. Cal.
synonymy of 7496 and 7495 highly probable, fide Fall 30-255

Vectura

(*Pseudallonyx* = *Vectura*, fide Fall 30-255)
(*Vecturoides* n. subg. Fall 30-256)
20935. pseudonycha Fall 30-256 So.Cal. Ariz.

Mecomycter

20936. liebecki Blais. 29-23 Tex.
20937. linearis Fall 30-256 Cal.

Semijulistus Schilsky 94-89
? bicoloripes Pic 28-54 N. Am.

Melyrodes

Pic, in Col. Cat. pars 103 (1929) treats this genus and Eurelymis as subfamily Melyrinæ of the family Dasytidæ.

CLERIDÆ *

Wolcott 27, 28; Chapin 27.

Cymatodera

20938. mitchelli Chapin 27-144 Tex.
20939. rufiventris Wolc. 27-105 Cal.
19579 (= 19580). fide Chapin 27-143

Lecontella

20940. gnara Wolc. 27-105 Ariz.

Enoclerus

20941. vetus Wolc. 27-107 Tex.

Hydnocera

20942. chapini Wolc. 27-81 Tex.
20943. mira Wolc. 28-207 Neb.
20944. puritana Wolc. 28-208 Mass.
20945. cuneiformis Wolc. 28-208 Ariz.
20946. blanchardi Wolc. 28-210 N.Mex.

Isohydnocera

20947. mima Wolc. 28-211 Ariz.
20948. liebecki Wolc. 28-211 N. J.

Erolestus Wolc. 27-109

20949. cleroides Wolc. 27-109 Pa.

CORYNETIDÆ *

Corynetes

7725a. nigricollis Wolc. 27-110 Cal.

CEPHALOIDÆ

Cephaloon

(*Typitium* Csy.)
20950. pacificum Van D. 28-260 Wash. Cal.

OEDEMERIDÆ

Oxacis

20951. falli Blatch. 28-63 Fla.

* The larval characters suggest the consolidation of these families, and subdivision into subfamilies Hydnocerinæ, Thaneroclerinæ, Priocerinæ, Korynctinæ, Tillinæ, Orthopleurinæ, Clerinæ, Enopliinæ, and Tarsosteninæ.

MORDELLIDÆ

According to the larval characters the tribe Anaspidini is to be transferred to Anthicidæ as a subfamily, or possibly to the Langurildæ. The family Mordellidæ by Dr. Böving's studies comprises only the tribes Mordellini and Mordellistenini.

Anthobatula n.n. Strand 29-29
(*Anthobates* ‖ Lec. nec Gistel)

RHIPIPHORIDÆ

Rivnay 29; Brown 30.

Trigonodera Dej. 34-217
(*Pelecotoides* Cast.)
7947. schaefferi Rivnay 29-18 Tex.
nubilus ‡ Schffr. nec Gerst.

Macrosiagon
20952. fernaldum Rivnay 29-26 Cal.
7952c. maritimum Rivnay 29-33 Fla. Ala.
7954b. horni Rivnay 29-36 Tex. Cal.
7956a. pulchrum Rivnay 29-38 N. C.

Rhipiphorus
20953. columbianus Brown 30-89 B. C.
20954. calopterus Rivnay 29-45 Me.
20955. neomexicanus Rivnay 29-50 N. Mex.
20956. nomiæ Rivnay 29-51 Ala.
20957. aurantus Rivnay 29-55 Tex.
20958. mutchleri Rivnay 29-57 Nev.
20959. iridescens Rivnay 29-60 Tex.
19614 = 7964, fide Rivnay 29

MELOIDEA

The families Meloidæ, Rhipiphoridæ, and Tetraonycidæ (based on Tetraonyx quadrimaculatus) constitute, according to the larvæ, a separate series. In it hypermetamorphosis occurs. It is associated by Dr. Böving with the cleroid assemblage of families, particularly Melyridæ, but qualified by the statement that there are some reasons for considering the possibility that it might be related to the Cantharoidea. The family Meloidæ is divided, on larval characters, into four subfamilies, viz.: Lyttinæ (including the tribes Zonabrini, Henoini, and Lyttini), Meloinæ, Horiinæ, and Nemognathinæ (including the tribes Sitarini and Nemognathini).

MELOIDÆ

Van Dkye 28, 29, 30; Mickel 28, 29; Chittenden 26.

Macrobasis
19616. murina Lec. valid fide Chitt. 26-118 Me.-Man.

Epicauta
20960. impressifrons Van D. 28-262 Cal.
20961. foxi Van D. 29-127 Cal.

Lytta
20962. nigrocyanea Van D. 29-129 Colo.
20963. maculicollis Van D. 29-130 Cal.

Tetraonyx
20964. albipilosa[1] Van D. 29-127 Tex.

Calospasta
8121b. perpulchra Horn, fide Van D. 29-127
8121c. cyanea Van D. 29-132 Cal.
Brachyspasta Van D. 28-451
20965. wickhami Van D. 28-452 Colo.

Gynaecomeloe
20966. parvicollis Van D. 28-450 Cal.

Meloe
20967. californicus Van D. 28-426 Cal. Wash.
20968. quadricollis[1] Van D. 28-431 Cal.
20969. franciscanus Van D. 28-437 Cal. Nev.

Meloe
8142b. occidentalis Van D. 28-422 Id. Colo. Alta.
8149 = americanus Leach nec auct. fide Van D. 30
americanus Van D. 28 et auct. = 8142 fide Van D. 30
impressus Van D. 28 = 8142a fide Van D. 30

Hornia
(*Leonia* and *Leonidia* are synonyms, fide Mickel 29)
8155. 8154 is a synonym, fide Mickel 29
20970. anthophoræ Mickel 28-38, fide Mickel 29 Colo.

Zonitis
20971. arizonica Van D. 29-132 Ariz.

Tricrania
belongs in Sitarini, fide Parker and Boving 24.

EURYSTETHIDÆ

Strand 26-74 prefers Aegialatidæ as family name, based on Aegialatis Gistl. Naturgesch. Tierreichs XI (1848) not Aegialites || Mann.

PYTHIDÆ

Blair, Col. Cat. pars 99, (1928)

PYTHINÆ

The subfamily Pythinæ includes Priognathus, Lecontia, Trimitomerus with species as given in 1920 Cat. and the genus Pytho, below.

Pytho
20972. americanus Kby.
20973. deplanatus Mann
19618. fallax Seidlitz
8203. niger Kby.
20974. seidlitzi Blair 25-211
niger ‡ Seid. 16-408.
8205. strictus Lec.
8204 is not found in N. Am.

SALPINGINÆ

Sphaeriestes Steph. 31-218
includes 8211, 8212, 8213
Vincenzellus Reitt. 11-418
includes 8214

Cariderus Muls. 59-46
includes 8217, with 8215, 8216, and nitens as synonyms.

CONONOTINÆ

Cononotus
includes 8208, 8209, 8210, and
20975. substriatus Van D. 28-258 Cal.

LACCONOTINÆ

Lacconotus
includes 12591 and 12592

Polypria
includes 12597

MYCTERINÆ

Mycterus
includes 12593, 12594, 12595 (with flavipennis Horn as a variety), and 12596.

PYROCHROIDÆ

Blair, Col. Cat. pars 90, (1928)

The family is divided by Blair into three subfamilies, Pyrochroinæ, Pedilinæ (= Pedilidæ), and Ischaliinæ for Ischalia Pascoe and Eupleurida Leconte, our species belonging to the latter.

Dendroides
20976. marginata Van D. 28-259 Cal.

Dendroides
20977. testacea Lec. 55-275 is valid fide Blair 28

PEDILIDÆ *

Pedilus
19620. fide Van Dyke 28-260 belongs in Dendroides, which is denied by Fall 29-14, who admits that it is not a typical Pedilus. Blair 14, and 20, includes Pedilus in Pyrochroidæ.

Eurygenius
20978. parvicornis Fall 29-333 Tex.
20979. perforatus Fall 29-334 Cal.

Stereopalpus
20980. columbianus R.Hopp. 25-207 B. C.

ANTHICIDÆ

Notoxus
20981. vandykei Blais. 29-57 Cal.

CEBRIONIDÆ

Cebrio
20982. speratus Fall 28-146 Ark. La.

PLASTOCERIDÆ **

Euthysanius
20983. horni[1] Fall 28-139 Cal.
20984. imparoculatus[1] Fall 28-141 Ariz.
20985. blaisdelli Tanner 26-188 Ut.

Aplastus
20986. scabripennis[1] Fall 28-141 Cal.
20987. piceicollis[1] Fall 28-142 Cal.
20988. productus[1] Fall 28-143 Cal.

Aphricus
20989. tenuis Fall 28-144 Ariz.

RHIPICERIDÆ

Zenoa
8543a. vulnerata Lec. fide Pic is a variety

BRACHYPSECTRIDÆ ***

Blair 30-49

Brachypsectra
9672. fide Blair 30-49

SANDALIDÆ

On the basis of larval characters, a new family is required for Sandalus.

Sandalus
8544a. brevicollis Melsh. fide Pic is a variety.

* This family is broken into two parts in Bradley's Manual. Pedilus, following Blair, is attached to Pyrochroidæ, the other genera form tribes of Anthicidæ. We note, however, that Tillyard retains the family. Its union with Anthicidæ was proposed by Casey in 1895.

** This family is united with Cebrionidæ in Dr. Böving's classification, based on larval characters.

*** Associated with Cantharoidea by Dr. Böving on the larval characters.

ELATERIDÆ

Blatchley 25, 27, 30; Fall 25, 26, 29; Brown 30; Hatch 30; Méquignon 30; Benedict i. litt. 30; Quirsfeld i. litt. 30.

Alaus

8571a. oklahomensis Hatch 30-23 Okla.

Monocrepidius

20990. fuscosus Blatch. 25-163 Fla.
planidiscus Fall 29-56 is syn. fide Blatch. 30-28 Ga. Fla.
20991. ferruginosus Fall 29-54 Ariz.
20992. delicatus Fall 29-55 Ga.
20993. difformis Fall 29-56 Ariz.

Limonius

20994. semiæneus Lec. 53-432 is valid fide Blatch. 30-28 Ga. Fla.

Athous

For synonomy see Méquignon, Bull. Soc. Ent. France. 30-95

Ludius

8705. not American, fide Quirsfeld i. litt.
8783. carbo Lec. = lobatus Esch. 22-69, fide VanDyke 24
8773. reverse synonymy
8775. appropinquans (Rand.) should replace elegans (Kby.), fide Fall, also Quirsfeld i. litt.
Quirsfeld considers tinctus Lec. a good species.

Eanus Lec. 62-171

genus is valid, fide Brown 30-161; species are:
8804. decoratus Mann. Yukon-Que.
vagus Lec.
costalis Cand. nec Payk.
20995. subarcticus Brown 30-163 Que.
8803. estriatus Lec. L. Sup.
20996. maculipennis Lec. 66-85 Lab. Que.
pictus Cand.
20997. albertanus Brown 30-165 Alta.

Hypnoidus

20998. extricatus Fall 26-191 Alas.

Drasterius

20999. debilis Lec. 84-5, and Quirsfeld i. litt. Mich. N. H N. Y.

Ischiodontus

21000. granosus Fall 25-180 Fla.

Melanotus

21001. simulans Blatch. 27-140 Fla.
21002. obscuratus Blatch. 27-141 Fla.
21003. piceatus Blatch. 27-141 Fla.

Cardiophorus

21004. aptopoides Cand. 65-40 fide Benedict i. litt. Ariz.

Aptopus

21005. lateralis spadiceus Cand. 93-176 fide Benedict i. litt. Ariz.

MELASIDÆ

Schenkling in Col. Cat., pars. 96, arranges the North American genera belonging in the family Melasidæ in four subfamilies, viz.: Gastraulacinæ (Dendrocharis); 2 Eucneminæ (Eucnemis, Poecilochrus, Phaenocerus, Stethon, Deltometopus, Dromaeolus, Fornax); 3 Dirhaginæ (Arhipis, Entomophthalmus, Dirhagus subgen. Hyporhagus*, Rhagomicrus, Adelothyreus); 4 Melasinæ (Isorhipis, Melasis, Euryptychus, Epiphanis, Palaeoxenis, Schizophilus, Hylis, Xylophilus, Hylochares, Sarpedon, Nematodes). He does not include Perothopinæ in the family Melasidæ.

* This subgeneric name is a synonym of Hyporhagus Thoms. 1860 Ann. Soc. Ent. France (3) VIII, p. 25. (In Monommidæ).

Fornax

21006. rugicollis[1] Fall 25-181 Ark.
21006½. horni Bonv. 70-981
fide Schenkling 28-43 Can. Ky.

Diphytaxis Horn 90-239

21007. excavata Horn 90-239.
fide Fall 28-236 Guat. Tex.

Melasis

21008. tsugæ G.R.Hopp. 26-226
B.C.

Dirhagus Latr. 34-130
(*Hyporhagus*) (*Microrhagus*)

21009. texanus Linell 99-184 Tex.

Rhagomicrus Fleut. 02-658
(*Isorhipis* Boisd. and Lacord. 35-620)

21010. obscuricornis Bonv. 71-97
N. Y.

In his arrangement of the genera and species of Melasidæ Schenkling makes the following changes:
Fornax horni Bonv. 70-891 given specific rank.
Dirhagus subgen. Hyporhagus includes 9154-9158.
and texanus Linell 99-184 Texas. (Leng Cat. No. 12517 Monommidæ)
Rhagomicrus, 9159 and 9160.
Isorhipis: adds nubila Bonv. Mon. Euc. 1871, p. 96, 108. N. Georgia [According to Dr. Geo. Horn only one specimen known, collected about 1836.]
Phlegon synonomy reversed.
Xylophilus Mann. 23-14 replaces Xylobius.
Hylis Gozis 86-21 replaces Hypocœlus

PEROTHOPIDÆ

Schenkling, Col. Cat. pars 101 (1928).

Perothops

21011. cervina is valid, fide Schenkling.

THROSCIDÆ

Schenkling, Col. Cat. pars 101 (1928).

Drapetes

9182a. nitidus Melsh. is raised to specific rank
americanus Gerst. 60-162 is not a synonym.

Pactopus

21012. fuchsi Csy. is listed as valid species.
alienus Bonv. 60-351 is syn. of 9195.

Throscus

9202. synonymy reversed.

BUPRESTIDÆ

Obenberger 24, 25, 27, 28, 30; Fisher 25, 28, 30; Fall 25, 26, 30; Chamberlin 25, 26, 28, 29; Champlain and Knull 25; Knull 27, 28, 29, 30; Van Dyke 27; Burke 28; Thery 29.

Chrysophana

9207. ab. cœrulans Obenb. 24-100
Cal.

Polycesta

9211. var. of montezuma, fide Obenb.

Acmæodera *

21013. flavinigrapunctata
Knull 28-314 Tex.

Acmæodera *

21014. hulli Knull 28-315 N. Mex.
21015. pinalorum Knull 30-15 Ariz.
9219a. gila[1] Knull 30-16 Ariz.
21016. confusa Fisher 25-41
cubæcola‡ Kerr.
9220. marginenotata Chev. 67-583
and Fisher 25-34.
cubæcola‡Fall

* In Obenberger's catalogue several species heretofore regarded as synonyms, e.g., mixta, arizonæ, immaculata, and others of doubtful status, e.g., obesa, pallidula, are apparently restored. 19633 is added to the doubtful class.

Acmæodera

21017. purshiæ Fisher 25-114 Nev.
9232. syn. of 9233, fide Chamberlin; valid species fide Obenb.
9284. syn. of 9233, fide Chamberlin; or of 9232, fide Obenb.
19636. var. of 9240, fide Chamberlin 29-112
19632. junki n.n. Théry 29-115 for squamosa VanD. nec Théry.

Ptosima

9291a. schæfferi Chamberlin 26-235 Tex.

Chalcophora

21018. pallida Kerr. 19-48 B. C.
As in Acmæodera and other genera the Obenberger catalog apparently restores, without explanation, several names to specific rank.

Trachykele

9330a. juniperi Burke 28-8 Cal.

Dicerca

21019. tenebrica Kby. (= prolongata Lec.) valid fide Fall 26.
21020. lugubris Lec. distinct from tenebrosa fide Fall 26.
21021. americana Hbst. valid Chamberlin 26-180

Poecilonota

21022. salixi Chamberlin 25-186 Cal.
salicis Obenb. Cat. and Chamberlin 26
9351c. collaris Obenb. 28-181 N. Y.
9351d. apicilla Obenb. 28-181 Ont.
? debilis Lec. 59-264 (a single specimen) Md.

Hesperorhipis Fall 30-74

21023. albofasciatus[1] Fall 30-75 Cal.

Buprestis

Chamberlin's catalogue reduces 9369 to a variety of 9368, but otherwise agrees substantially with our 1920 list.
Obenberger's catalogue recognizes about eleven more valid species, and about as many more subspecies, varieties and aberrations, which may not be entirely approved by American students.

Melanophila

21024. drummondi Kby. valid Chamberlin 26
ab. tristicula Obenb. 28-209 Cal. B. C.
9390. ab. monochroa Obenb. 28-209 Cal.
ab. isolata Obenb. 28-209 Cal.
ab. plagifera Obenb. 28-210 N. H.
21025. atropurpurea Say valid ? Chamberlin 26
21026. lecontei Obenb. 28-210 Cal.
21027. occidentalis Obenb. 28-209 Cal.
9387b. abietis n.n. Obenb. for ables

Anthaxia

21028. pseudotsugæ Chamberlin 28-95 Or.Cal.Ariz.
? fisheri Obenb. 28-255 Kan.
? carolinensis Obenb. 28-256 Carolina
? knulli Obenb. 28-256 Cal.
? nevadensis Obenb. 28-257 Nev.
? prasina falsula Obenb. 28-257 Cal.
? strigata grossa Obenb. 28-257 Cal.
9394. Obenberger recognizes as valid species or varieties all the synonyms heretofore placed under æneogaster adding besides the six above cited, and ærisa Crotch. We are unwilling to accept such recognition until verified.

Agrilaxia

21029. borealis Obenb. 24-107 Pa.
9399a. huachuæ n.n. Obenb. 30-551 Ariz.
arizonæ ‖ Chamberlin 26-46 nec Obenb.

Chrysobothris

21030. fragariæ Fisher 30-149 Wash. Id.
21031. burkei Chamberlin 29-110 Cal.
21032. socialis Waterh. 87-39, fide Chamberlin Cat. Mex. Ariz.
9416. synonomy reversed, fide Chamberlin Cat.
9456. synonomy reversed, fide Chamberlin Cat.
9448. 9449 and 9450 synonyms, fide Chamberlin Cat.

Actenodes

21033. arizonica[1] Knull 27-115 Ariz.
9482. auronotata is valid, fide Fisher 25-88

Agrilus

(*Engyaulus* Waterh. is synonym fide Fisher 28-104)
21034. arbuti Fisher 28-50 Oreg.
21035. albocomus Fisher 28-59 Ariz. Tex.
21036. atricornis Fisher 28-86 Conn. Ill.
21037. benjamini Fisher 28-107 Tex. Kan.
21038. pilosicollis[1] Fisher 28-111 Ark.
21039. quercicola Fisher 28-120 Colo. Ariz. Ut.
21040. olivaceoniger Fisher 28-124 Mass. Conn.
21041. fulminans Fisher 28-148 Cal.
21042. populi Fisher 28-150 Cal.B.C.Mont.
21043. betulæ Fisher 28-153 Md. Va.
21044. costipennis Fisher 28-182. Cal.

Agrilus

21045. baboquivoriæ Fisher 28-184 Ariz.
21046. lautuellus Fisher 28-202 Tex.
21047. pubifrons Fisher 28-237 Idaho
21048. mimosæ[1] Fisher 28-241 Tex.
21049. chiricahuæ Fisher 28-243 Ariz.
21050. æneocephalus Fisher 28-245 Ariz.
21051. malvastri Fisher 28-247 Kan.Tex.Alta.
21052. falli Fisher 28-249 Ariz.
21053. cupreonitens Fisher 28-265 Tex.
21054. prosopidis Fisher 28-275 Tex.
21055. exiguellus Fisher 28-277 Tex. Kan.
21056. acaciæ Fisher 28-279 Tex.
21057. barberi Fisher 28-311 Ariz.
21058. pubescens Fisher 28-315 Ariz. Tex.
21059. eleanoræ Fisher 28-320 Tex.
21060. oblongus Fisher 28-333 Md. Va.
9542a. pseudocoryli Fisher 28-218 Conn.-Kan.
9553a. celticola Fisher 28-294 Tex. Ariz.
9523c. corylicola n.n. Fisher for coryli‖Horn nec Ratz.
9550. =pulchellus Bland
9533. =gibbicollis Fall
21061. cupreomaculatus Duges 91-48 fide Fisher 28-46 and Mason 26-84. Ariz.

Agrilus

9523d. =9523
21062. geminatus Say 23-163 is valid
21063. quadriimpressus Zieg. 46-267 is valid Ga.
21064. quadriguttatus Gory 41-228 is valid Va.-Colo.
9542. canadensis Obenb. is synonym
9543. =9542b.
21065. transimpressus Fall 25-181 Ark. N. J.
21066. illectus Fall 01-242 is valid Fall 26-125
21067. olentangyi Champlain and Knull 25-469 Tex. Ohio
21068. duncani Knull 29-270 Ariz.
21069. fisheriana n.n. Knull 30-3 Ariz.
fisheri‖Knull 29-271
21070. parafloridanus Knull 29-272 Fla.
21071. trichocarpæ Chamberlin 29-112 On.B.C.Cal.
21072. manzanitæ Chamberlin 29-113 Oreg.
19669. cf. Nylen 29-219

Pachyschelus

9565b. nicolayi Obenb. 25-103 Ark.
? hiimpressa Mots. 59-54, fide Obenb. 25-96 Tenn.
? oblongus Mots. 59-54 fide Obenb. 25-96 Tenn.

Taphrocerus

21073. nicolayi Obenb. 24-72 Mass. N. Y.

DRYOPOIDEA AND DASCILLOIDEA

The essay "On the Classification of Beetles According to Larval Characters" by Dr. Adam G. Böving indicates changes in the classification of the genera heretofore included.

1. The Dryopoidea will include the following families:
   Laridæ*, formerly Potamophilini.
   Dryopidæ, including Dryopini, Helmini*, and Ancyronychini.
   Chelonaridæ.
   Ptilodactylidæ, including Ptilodactylinæ, Eurypogon*, and Anchytarsini.
   Psephenidæ, including Psephenus and Eubrianax.
2. The Dascilloidea will include the following families:
   Heteroceridæ.
   Helodidæ.
   Dascillidæ, except the tribes transferred to Dryopoidea.
   Nosodendridæ.

Eucinetidæ are separated from Dascillidæ in Bradley's Manual, but remain in the Dascilloid series, although Dr. Böving says "judging from the larva the genus cannot be placed with either the Dascilloidea or Dryopoidea."

3. Both series were derived from Byrrhoid ancestors, but are now distinguishable.

* The rank of these groups is altered in Dr. Böving's 1931 paper, becoming Larinæ, Helminæ, and Eurypogonidæ respectively.

DRYOPIDÆ

LARINAE

Böving 29, 31.

The studies of Dr. Böving on the larvæ of the beetles heretofore grouped in the series Dryopoidea, Dascilloidea and Byrrhoidea indicate certain changes in classification whereby the subfamilies Larinæ and Helminæ are separated from Dryopidæ.

Lara
21074. gehringi Darl. 29-329 Wash. Cal.
9590a. amplipennis Darl. 29-330 Wash. B. C.

HELMINAE

Stenelmis
21075. fuscatus Blatch. 25-164 Fla.

Helmis
21076. brunnescens Fall 25-177 Cal.
21077. castanipennis Fall 25-177 Wyom.
21078. immunis Fall 25-178 Ct. N. J.
21079. tardellus Fall 25-179 Mass.
21080. ampliatus Fall 25-179 Mass.-Va.

Helmis
21081. dispar Fall 25-180 Cal.
21082. arizonica[1] Brown 30-90 Ariz.
21083. thermarum Darl. 28-5 Oreg.
21084. koebelei Martin 27-68 Wash.
9628=9619, fide Fall 25-180

Limnius
21085. trivittatus[1] Brown 30-91 Que.
21086. subarcticus Brown 30-241 Que.

PTILODACTYLIDÆ

Ptilodactyla
21087. equilobata Chapin 27-245 Tex.
21088. exotica Chapin 27-246 Ill.

HELODIDÆ

Cyphon
21089. confusus Brown 30-91 Que.

DASCILLIDÆ

Macropogon
21090. dubius Brown 29-273 B.C.
21091. cribricollis Brown 29-274 B.C.
21092. rubricollis Pic 27-34 Cal.

BYTURIDÆ

The genus Byturus is found on larval characters to belong nearer to the Anthicidæ than the Dermestidæ and is separable as a family. The Dermestidæ are divided into two subfamilies, Dermestinæ and Attageninæ. The genus Thylodrias is apparently included in the latter.

OSTOMATIDÆ

The spelling of this family name is amended by Dr. Böving, and its tribes are ranked as subfamilies.

DERMESTIDÆ

Perimegatoma

21093. perversa Fall 26-194 Yukon
21094. giffardi Blais. 27-163 Cal.

Trogoderma

21095. sinistra Fall 26-193 Yukon
9774 = 9770, fide Mutchler 27-25

NITIDULIDÆ

Meligethes

10024. cf. Chitt. 25-149

Brachypterolus

19687, reverse synonymy
fide Hatch 28-35

MONOTOMIDÆ

Hetschko, in Col. Cat. pars. 109, 1939, treats this family as a subfamily of Cucujidæ, together with Silvanidæ and Hemipeplidæ, which have been shown by Böving and Arrow respectively to be distinct. We therefore retain the family name.

Monotoma

21096. avara Blatch. 28-65 Fla.
10160 is a synonym of 10159, fide Hetschko
21097. corpulenta Mots. 68-200, fide Hetschko La.
21098. fulvipennis Mots, 68-199, fide Hetschko N. Am.
quadrifoveata Aubé not N. Am., fide Hetschko
10178 belongs here (?), fide Hetschko

Europs

21099. fervida Blatch. 28-66 Fla.
21100. frugivorus Blatch. 28-66 Fla.

Bactridium

adustus Reitt. is valid but not N. Mex., fide Hetschko
21101. striolatum Reitt. is valid, fide Hetschko

Hypocoprus

10193. This genus is treated by Hetschko as a tribe in Cucujidæ, and the name of the species is given as tenuis Csy., formicetorum Mots. being confined to the Old World.

CUCUJIDÆ

Hetschko's treatment of this family divides it into seven subfamilies, viz.: Cucujinæ, Narthecliinæ, Prostominæ, Silvaninæ, Hemipeplinæ, Scalidiinæ, and Monotominæ, disregarding apparently the work of Böving and Arrow

The following changes in nomenclature, besides those noted in our first supplement, are to be noted:

Uleiota Latr. replaces Brontes Fab.

10273. **denticulata Smith 51-14** is added as a synonym
10243. testaceus‡Csy. nec Fab. 84-87 is added as a synonym
21102. testaceus Fab. is valid Cosm.
10261. =minutus Oliv.
21103. puberulus Lec. is valid
21104. pusillimus Mann. is valid Aleut. Alas.
21105. gilæ Csy. is valid but belongs in Silvanus
21106. unidentatus Fab. 92-232 Cosm.

Uleiota

10194. 10195 and 10196 are only varieties.
21107. Cathartus quadricollis Guer. is valid Cosm.
10201 and 10203 are synonyms of above

Monanus Sharp 79-85 (to follow Planismus)

21108. concinnulus Walk. 58-207 Cosm.

Læmophloeus

Key to species, Park 29-433.

HEMIPEPLIDÆ

Arrow, 30-225, makes the genus Hemipeplus a family in the heteromerous series.

LANGURIIDÆ

Lewis 84; Arrow 25, 29; Schenkling 28.

Languria

10279a. ab. puncticollis Say
21109. interstialis Csy, valid fide Schenkling
10287 transferred to Acropteroxys

Acropteroxys

21110. thoracina Csy., valid fide Schenkling
10294 a, ab. of 10292, fide Schenkling
obscura Mots, ab. of 10292, fide Schenkling

Hapalips

belongs in Languriidæ, fide Arrow 29-318.

BIPHYLLIDÆ

Arrow 29-306

The type is the genus Biphyllus. Our genera Anchorius and Diplocœlus are presumably included.

CRYPTOPHAGIDÆ

Pharaxonotha

21111. zamiæ Blake 28-111 Fla.

Glyptophorus Park 29-430

21112. mycetoecus Park 29-430 Ia.

Cryptophagus

21113. maximus Blake 28-109 Cal.

Ephistemus

21114. punctatus Blatch. 25-165 Fla.

MYCETOPHAGIDÆ

Hetschko, Col. Cat. pars 108, (1930).

Hetschko has transferred to this family Triphyllus Latr. 29-98, placed by Casey in Melandryidæ; Berginus is also transferred from Cisidæ. On the other hand, Myrmecoxenus is taken from Mycetophagidæ and added to Colydiidæ. In connection with the first of these changes, it is to be noted that Pisenus, the generic name used by Casey for Triphyllus ‡ auct. nec Latr., is not mentioned.

Typhæa
10509. stercorea L. 58-357.
fumata L. 66-654.

COLYDIIDÆ

Hetschko, Col. Cat. pars 107, (1930).

Namunaria Reitt. 82-114
(*Coxelus*‡Horn nec Latr.)

Rhagodera
21115. laticeps Blais. 25-326 San Benito Is.

Myrmecoxenus
10521. transferred from Mycetophagidæ and spelling changed.

Nematidium
10581. filiforme Lec. is correct name for our species, mustela Pascoe being a synonym of cylindricum Fab. from South America.

Bitoma
21116. paradisea Blatch. 30-32 Fla.
21117. cremata Fab. 75-69,
fide Cooper 30-21 occurs on L. I.

Colydium
21118. bicoloratum Blatch. 25-165 Fla.

MURMIDIINAE

The family Murmidiidæ is treated by Hetschko as a subfamily of Colydiidæ and divided into two tribes Murmidiini and Mychocerini, the latter including the genus Mychocerus.

EUXESTINAE

Euxestus Woll. 48-411
(*Hypodacne* Lec. 170)
10346. This species is removed by Hetschko from the Erotylidæ to form this subfamily in Colydiidæ.

LATHRIDIIDÆ

Lathridius
10629. cinnamopterus Mann.
montanus Fall is synonym, fide Fall 26
10630. costicollis Lec.
armatulus Fall is synonym, fide Fall 26
21119. carinifer n.n. Fall 26-197
costicollis‡Fall nec Lec.

Corticaria
21120. arctophila Fall 26-197 Alas.
21121. cavicauda Fall 26-198 Alas.

Corticaria
10683. falli n.n. Hetschko 29-156
cribricollis‖Fall nec Fairm.
Hetschko in Junk Col. Cat. makes 10625 a synonym of angusticollis Gyll. 27-136
transfers 10635 to Lathridius,
10667 to Cartodere with locality Cuba only,
makes Eufallia unicostata valid,
and treats all the heretofore unrecognized species as valid.

MYCETÆIDÆ

Stethorhanis Blais. 30-376
21122. vandykei Blais. 30-381 Cal.

ENDOMYCHIDÆ

Stenotarsus
21123. blatchleyi Walton 28-217
Fla.

PHALACRIDÆ

Hetschko, Col. Cat. pars 108 (1930).

Phalacrus
21124. vicinus Guill. 94-292 Mich.Mo.
21124a. subsulcatus Guill, 94-292
Mich.Mo.
21125. propinquus Guill. 94-293
Kan.
21126. americanus Guill. 94-294
Mich.

Olibrus
10778. caseyi n.n. Hetschko 28-142
egenus‖Csy. nec Guill.
piceus Boh. 58-38 (Eugen. Reise)
Cal.(?)

Tinodemus Guill. 94-300
21127. grouvellei Guill. 94-302 Mich.

Stilbus
21128. atomarius L. 67-574,
fide Leonard N. Y. State List
N.Y.

Gorginus Guill. 94-283
(*Erythrolitus* Csy.)
10867. rubens (Lec.)

COCCINELLIDÆ*

Hyperaspis
21129. pluto Fall 25-311 Cal.
21130. jovialis Fall 25-311 Cal.

Scymnus
21131. pellio Blatch. 27-142 Fla.
11028. melsheimeri n.n. Weise 29-33
for collaris Melsh. nec Herbst
11047. sanctus n.n. Weise 29-33
for decipiens Csy. nec Weise
11084. nevadensis n.n. Weise 29-33
for innocuus Csy. nec Boh.
11085. indianensis n.n. Weise 29-33
for rusticus Csy. nec Weise
11092. georgei n.n. Weise 29-33
for bisignatus Horn nec Boh.

Scymnus
11115a. caseyianus n.n.
for brunnescens Csy. nec Mots.
caseyi‖Weise 29-33 nec Berthes
11120. lunaris n.n. Weise 29-33
for stigma Csy. nec Weise

Delphastus
19760. removed to Scymnillodes,
Chapin 30-493.

Psyllobora
11150 b, is a valid species.
fide Blatch. 30-38

Adalia
11193a. schuetti Park 29-4[illegible] Iowa

ALLECULIDÆ

Mycetochara
11331. rufipes Lec. belongs here,
not under 11267.

* The European Bulæa lichatschovi has been found at Paterson, N. J., fide Schott 26-17.

TENEBRIONIDÆ*

Telabis
21131. nevadensis Blais. 25-372 Cal.

Melanastus
21132. texanus Blais. 26-22 Tex.

Usechus
11673a. horni Blais. 29-6 Cal.
11673b. santaclaræ Blais. 29-6 Cal.
11673c. trinitatis Blais. 29-7 Cal.

Usechimorpha Blais. 29-9
21133. barberi Blais. 29-11 Cal.

Eulabis
11919 = 11916, fide Blais. 25-79 (? i. litt.)
19840 = 11920, fide Blais. 25-79

Eleodes
11930c. lassenica Blais. 25-373 Cal.
21134. parowana Blais. 25-374 Ut.
21134a. mimica Blais. 25-375 Ut.
21135. fuscipilosa Blais. 25-376 Ut.
21136. reducta Blais. 25-377 Ut.
21137. mazatzalensis Blais. 25-379 Ariz.
21138. coloradensis Blais. 25-380 Colo.
21139. concinna Blais. 25-381 Nev.Ut.Cal.
21140. wenzeli Blais. 25-381 Tex.
21141. speculicollis Blais. 25-382 Tex.
11951c. glabriuscula Blais. 25-383 Tex.
11961h. montana Blais. 25-385 Cal.
11961l. tularensis Blais. 25-386 Cal.
11980f. alticola Blais. 25-387 Cal.
11988b. dilaticollis Blais. 25-388 Wash.
11988c. sierra Blais. 25-78 Cal.
11990b. difformis Blais. 25-389 Wash.
11970 is not syn. of 11971, fide Blais. 25-79

Eleodes
11970a. fenyesi Blais. 25-77 Cal.
21142. delicata Blais. 29-164 **Ariz.**
21143. californica Blais. 29-165 Cal.

Neobaphion Blais. 25-390
type 11998

Embaphion
12005a. blaisdelli Benedict 27-46 N.Mex.

Coelosattus Blais. 27-166
21144. fortineri Blais. 27-167 Cal.

Blapstinus
21145. cinerascens Fall 29-58 So. Cal.
21146. falli Blais. 29-21 Cal.

Alaudes
21147. alternata Fall 28-148 Cal.
21148. fallax Fall 28-150 Cal.

Leichenum
12277. seriehispidum Mars. 76-101
fide Carter 28-270
variegatum Klug
squamosa (Endotbina) Cart.

Diaperis
21149. californica Blais. 29-60 Cal.
12306a. nigronotata Pic 26-22 Fla.
12306b. bicoloriceps Pic 26-22 Fla.

Hypophlœus
21150. prætermissus Fall 26-199 Mass.-Yukon
? mexicanus Reit. 77-191, fide Blatch. 30 Fla.

Cœlocnemis
21151. barretti Blais. 28-163 Cal.
21152. tanneri Blais. 28-164 Ut.

MELANDRYIDÆ

Eustrophinus
21153. ornatus VanD. 28-251 Ariz.

Microscapha
21154. californica Barrett 28-173 Cal.

Melandrya
21155. blackmani Hatch 27-364 N. Y.
(*Emmesa*)
21156. testacea VanD. 28-252 Cal.
(*Xecommesa* Hatch 27-365)
21157. noveboracensis Hatch 27-365 N. Y.

Hypulus
21158. californicus VanD. 28-253 Cal.

Allopoda
19912 = 12580, fide Blatch. 28-49

Canifa
12585a. millikini Hatch 27-366 Ill.

Osphya
21159. essigi VanD. 28-255 Cal.

Lacconotus **
21160. pallidus VanD. 28-256 Cal.

* For changes in classification of this and related families, as indicated by larval characters, see papers by R. A. St.George and Adam G. Böving.
** Included in Pythidæ by Seidlitz.

PTINIDÆ

Ptinus
21161. ocellus Brown 29-109 Vanc.

ANOBIIDÆ

Xarifa
21162. lobata Fall 29-57 Cal.

Ptilinus
21163. flavipennis Csy. valid, fide R.Hopp. 28-8
12866 = 12865, fide R.Hopp. 28-8

BOSTRICHIDÆ

Stephanopachys
(*Prostephanus*)
21164. apax Lesne 30-102 Ariz.

Polycaon
(*Heterarthron*)
21165. parvulum Lesne 25-29 Cal.

Dinapate
12923. See Fenyes, Rovart Lapok VIII, 4; Garnett, Ent. News, 1918, p. 41.

PSOIDÆ

This family includes the following genera, usually placed in the Bostrichidæ:

Stephanopachys, Rhizopertha, Dinoderus, as well as the tribe Psoini, according to Böving and Craighead, quoting Saalas and Lesne. It is a part of the series Bostrichoidea. From that series, on larval characters, the families Ciidæ (= Cisidæ) and Sphindidæ are to be removed, the first to the new series Cleroidea, composed of Dermestidæ, Melyridæ, Ostomatidæ, Cleridæ; the second to the Cucujoidea. "The larva of the Sphindidæ," says Dr. Böving, "represents unquestionably a simple, primitive cucujoid type, but its more precise systematic position is rather uncertain." Compare also P. de Peyerimhoff, Etudes sur les larves des coléoptères, Ann. Soc. Ent. France, 1921, pp 109-110

CIIDÆ (CISIDÆ)

Dr. Böving, while finding part of the larval characters suggestive of bostrichoid relationship, states that other characters "speak strongly against a taxonomic position within the Bostrichoidea and for the association with the Cleroidea." Peyerimhoff in 1933, places Ciidæ after Tenebrionidæ in the series Cucujoidea, with Schwarz and Barber, 1914, p. 177, as authority, but adds in a footnote, "Il faut bien leur donner une place."

SCARABAEIDÆ

Brown 25, 27, 28, 29, 30; Glasgow 25; Fall 26, 27, 28, 29, 30; Schott 26; Hatch 26, 30; Darlington 27; Langston 27; Schaeffer 27; Buchanan 27; Blatchley 28, 29, 30; Luederwaldt 28; Barber 28; Hopping 28; Van Dyke 28; Wallis 28; Luginbill 28; Tanner 28; Strand 28; Blaisdell 30. The classification of Scarabæoidea on larval characters differs mainly in raising the rank of certain groups, thus adding as families, Geotrupidæ, Trogidæ, and Acanthoceridæ, with others as subfamilies.

Canthon

21166. 13038a is a valid species, fide Blatch. 28-68

Pinotus

21167. spadiceus Leuderwaldt 28-65 Va.

Phanæus

13072. See Barber 28-383 regarding nomenclature

Onthophagus

19946. aciculatus n.n. Blatch. 28-128 for alutaceus ‖
21168. oklahomensis Brown 27-128 Okla. Tex. Fla. N.C.
21169. knausi Brown 27-130 Kan. Neb.
21170. cynomisi Brown 27-131 Okla.
21171. cochisus Brown 27-132 Ariz.
13085. floridanus Blatch. 28-128 n.n. for nigrescens ‖
21172. blatchleyi Brown 29-86 Fla.
13081. medorensis Brown 29-204 Okla. Tex.
guatemalensis ‡ Schffr. nec Bates

Aegialia

13105a. insularis Brown 29-87 Q. C. Is.
21173. arenaria (Fab.) 87-11 fide Darlington 27-98 Mass.
21174. lacustris Lec. 50-225, fide Darlington 27-98 Me. N. H.

Aphodius

21175. subterraneus (L.) 58-348 fide Schott. 26-17 N. J.
13123. = tenellus Say, fide Brown 30, putridus not in N. Am.
13195a. awemeanus Brown 28-306 Man.
21176. wickhami Brown 28-301 Colo.
21177. manitobensis Brown 28-302 Man.
21178. haywardi Brown 28-303 Colo.
21179. hirsutus Brown 28-303 Wash.
21180. albertanus Brown 28-304 Alta.
21181. fimbripes Brown 28-305 Ut.
21182. errans Brown 30-243 Que.
21183. edmontonus Brown 29-87 Alta.

Aphodius

21184. bryanti Brown 29-88 Alta.
21185. carri Brown 29-89 Alta.
21186. pyriformis Brown 29-205 Nev.
21187. corruptor Brown 29-206 Alta.-B. C.
21188. anomaliceps Brown 29-207 N. Mex.
21189. dentigerulus Brown 29-208 Okla.
21190. snowi Brown 29-209 Ariz.-Colo.
13186. = aleutus (Esch.) 22-27 fide Fall 26
21191. gravis Fall 27-137 Cal.
21192. davisi Fall 30-73 Cal.
21193. neodistinctus Brown 28-89 Okla.
13145. = 13146, fide R.Hopp. 28-6
13109b. garmani Brown 29-227 Wyom.
21194. pingellus Brown 29-228 Colo.-B. C.
21195. omissus Lec. is valid, fide Brown 29-224
21195a. torpidus Horn, fide Brown 29-224
21196. hyperboreus Lec. is valid, fide Brown 29-224
angularis Lec. is syn., fide Brown 29-224
21197. pinguis Hald. is valid, fide Brown 29-224
13108 is syn., fide Brown 29-224
13109a = 13109, fide Brown 29-224
21198. smithi Brown 30-2 B. C.
21199. cynomysi Brown 27-166 Okla.
21200. cavidomus Brown 27-167 Okla.
21201. martini VanD. 28-153 Cal.
21202. slevini VanD. 28-155 Cal.
(*Platyderides*)
Includes 13151-13158, 13160, 13167, 13181, 19947
21203. russeus Brown 28-14 Okla. Kan.
21204. aquilonarius[1] Brown 28-16 Sask.
21205. thomomysi Brown 28-17 Man.
21206. insolitus Brown 28-18 Okla.
21207. criddlei Brown 28-19 Man. Alta. Sask.
21208. punctissimus Brown 28-35 Okla.

Aphodius
21209. oklahomensis Brown 28-36 Okla.
21210. talpoidesi Brown 28-37 Man.
21211. socialis Brown 28-38 Man.
21212. leptotarsis Brown 28-15 N.W. Terr. Kan.
19947 is var. of 13154, fide Brown 28

(*Didactylia* d'Orb.)
includes 13176 and 13174 of which 13171 is syn. fide Brown 29

Dialytellus Brown 29-211
includes 13207 and 13208

Euparixa Brown 27-288
21213. duncani Brown 27-288 Ariz.

Atænius
21214. erratus Fall 30-96 Fla.
21215. brevis Fall 30-98 Fla.
21216. salutator[1] Fall 30-99 Fla.
21217. ludovicianus Fall 30-100 La.
21218. rudellus[1] Fall 30-103 Fla.
21219. consors Fall 30-104 Mass.-N. Mex.
21220. anticus Fall 30-105 Ark. Ga. Fla. La.
21221. solitarius Blatch. 28-69 Fla.
21222. floridanus[1] Brown 30-3 Fla.
21223. oklahomensis Brown 30-4 Okla.
21224. cribratus VanD. 28-156 Ariz.
21225. carolinus VanD. 28-157 N. C.
21226. semipilosus[1] VanD. 28-158 Ariz.
13241 belongs in Atænius, fide Brown 28-307

Pseudatænius Brown 27-290
type 13222

Dialytes
21227. criddlei Brown 29-210 Man.

Rhyssemus
21228. puncticollis Brown 29-91 Ont.
21229. neglectus Brown 29-92 Okla. Colo.

Ochodæus
13272 = 13259, fide Brown 30-4

Odontæus
21230. falli Wallis 28-151 Man.
21231. thoracicornis Wallis 28-153 Ohio
21232. floridensis Wallis 28-155 Fla.
21233. simi Wallis 28-170 N.J.
21234. liebecki Wallis 28-173 Conn.
21235. darlingtoni Wallis 28-175 N.J.
21236. alabamensis Wallis 29-239 Ala.

Bolbocerosoma
21237. lepidissimum Brown 28-193 Okla.
21238. confusum Brown 28-194 Okla.Ark.Ia.
21239. hamatum Brown 29-213 Ga.

Geotrupes
Nylen 29-219 reports a single specimen of G. sylvaticus from Rhode Island.

Acoma
21240. arizonica Brown 29-212 Ariz.Cal.
21241. robusta VanD. 28-159 Cal.
21242. confusa VanD. 28-160 Cal.

Glaresis
21243. knausi Brown 28-73 Kan.
21244. canadensis Brown 28-74 Man.
21245. confusa[1] Brown 28-75 Ut.
21246. clypeata[1] VanD. 28-162 Cal.

Serica
21247. errans Blatch. 29-35 Fla.

Phyllophaga
21248. austricola Fall 29-110 and 216 Miss.
21249. mariana[1] Fall 29-111 Fla.
21250. iroides Fall 29-112 Ariz.
21251. microdon Fall 29-113 Tex.
21252. paternoi Glasgow 25-293 Va. N.C.
13496a. angulata Glasgow 25-294 N.J. Va.
21253. davisi Langston 27-221 Miss.
21254. deani Luginbill 28-78 S.C.
21255. iota Luginbill 28-87 S.C.

Phytalus
21256. vanalleri Schffr. 27-215 Ala.Tenn.

Gronocarus Schffr. 27-213
21257. autumnalis Schffr. 27-213 Ala.

Polyphylla
13595, 13598, 13605, 13607, 13610, 13612, 13614, 13615, 13617, 13620, 13622, to 26 are valid, fide Fall 28
oklahomensis Hatch 26-145 = 13598 Okla.
21258. uteana Tanner 28-276 Ut.
21259. rufescenta Tanner 28-276 Ut.

Thyce
13628. Delete locality N. Mex.
13645. belongs in Thyce

Dinacoma
21260. caseyi Blais. 30-174 Cal.

Dichelonyx
13664=13665, fide VanD. 28-165

Hoplia
13697a is valid species, fide Blatch. 30-36

Anomalopides n.n. Strand 28-2
(*Anomalopus*‖Csy. nec Dunn)

Strigodermella
21261. knausi Brown 25-200 Kan.
21262. oklahomensis Hatch 30-24 Okla.

Ochrosidia
21263. subvittata Brown 30-5 Okla.
21264. nigricollis Burm. 47-50, fide Buchanan 27-165 Tex.La.
robusta Lec.

Ligyrus
21265. lævicollis Bates 88-316, fide Blatch. 28-49 Fla.
Strategus
13896a. houstonensis Knaus 25-182 Tex.

Cotinis
13931. ab. brunnea Hatch 30-25 Okla. Ind.
Euphoria
13936 is a var. of 13937, fide Brown 30-5

LUCANIDÆ

Van Dyke 28

Platycerus
21266. æneus VanD. 28-109 Oreg.
14045a. cribripennis VanD. 28-107 Cal.
14042 = 14047 a, fide VanD. 28
14044 = 14043, fide VanD. 28
14049 = 14047 b, fide VanD. 28
14052 = 14055, fide VanD. 28

CERAMBYCIDÆ*

Schmidt 24; Champlain and Knull 25, 26; R. Hopping 25, 28; Fall 25, 26, 28, 29; Schott 25; Champlain, Kirk and Knull 25; Knaus 25; Fisher 25, 26; Blatchley 25; Wallis 26; Plavilstshikov 27; Hardy and Preece 27; Knull 27, 28, 30; Van Dyke 27, 28, 29; Swaine and Hopping 28; G. R. Hopping 28; Schaeffer 29; Martin 30; Psota 30; Linsley 30.

Parandra
21267. marginicollis Schffr. 29-40 So.Cal.
21268. punctillata Schffr. 29-40 Ariz.

Tetropium
21269. alaskanum Fall 26-201 Alas.

Dicentrus
(*Paraopsimus* Champlain and Knull 26-205 = *Dicentrus* fide R. Hopping 28-7)
21270. bidentatus Champlain and Knull 26-205 Oreg.

Oeme
21271. hirsuta VanD. 27-99 Ariz.

Styloxus
21272. ruficeps[1] VanD. 27-99 Ariz.

Methia
21273. brevis[1] Fall 29-58 So.Cal.

Romaleum
21274. cylindricum[1] Knull 27-116 Ariz.
21275. cortiphagus Craighead 23-69 (larva) Knull, 27, 116 (Adult) Pa.

Anoplium
21276. duncani[1] Knull 27-117 Ariz.
21277. masoni Knull 28-11 Ill.

Ibidion
21278. pollngi Fall 25-182 Ariz.

Eumichthus
14293a. ater Hardy and Preece 27-188 B.C.
14293b. ruber Hardy and Preece 27-188 B.C.

Centrodera
21279. pilosa VanD. 27-101 Cal.
21280. blaisdelli VanD. 27-102 Cal.

Pseudopachyta S. & H. 28-16
14348. rugipennis (Newn.)

Pidonia Muls. 63-570 *
(*Haplosalia* Csy. 13-200)
(*Thesalia* Csy. 13-198)
according to S. and H. 28-18:
14305 = ruficollis Say
14306 = " "
14308 = " "
14308a = " "
14310 = " "
14568 = 14569 (?)

Idiopidonia S. and H. 28-19 *
14534. pedalis Lec. (genotype)

Grammoptera Serv. 35-215 *
(*Parallelina* Csy.)
14455 transferred to Alosterna
14457 = 14456
14461 = 14459

Alosterna Muls. 63-576 *
14455, 14464, 14467, 14468 belong here.

Pseudostrangalia S. and H. 28-24 *
14484. cruentata Hald. (genotype)
14485 = 14484

* The classification of this family on larval characters indicates six subfamilies instead of three, the tribes Asemini, Lepturini, and Disteniini being raised to subfamily rank, with the last named especially by its long, slender larva.
[1] Synonymy fide R. Hopping 28 or S. and H. 28.

Leptura *

21281. anthracina Lec. 75-175 is valid Oreg.
subcostata Fall synonym, fide S. and H., 28-26 Cal.
14481, 14475, 14486, 14482, 14487, 14474, 14471, belong here
14483=14482.
14478 and 14479=14474
14480, 14470, 14473 and 14472=14471
14488 and 14465 belong here

Typocerus *

21282. manitobensis[1] S. and H. 28-35 Man.
14545=14544
14542= ? lunata Fab.
14547=14546
20080=14551

21283. deceptus Knull 29-144 Pa.

Charisalia *

14464 transferred to Alosterna

Anoplodera Muls. 40-285 *

(*Judolia* Muls.)
(*Ortholeptura* Csy.)
(*Brachyleptura* Csy.)
(*Strangalepta* Csy.)
(*Xestoleptura* Csy.)
(*Strophiona* Csy.)
14517, 14536, 14516, 14527, 14528 and 14431 belong here
14452, 14518, 20072 = 14516
14529 = 14527

21284. knulli S. and H. 28-46 Wyom.
14427, 14437, 14424, 14505, 14507 and 14489 belong here
14428, 20065, 14429, 14430, 14436 = 14427
20066 = 14424
14506 = 14505
14477, 14426, 14432, 20068, and 20069 belong here
20063 and 20064 = 14426
20070 = 14432
14435, 14508, 14512, 14510, and 14498 belong here
14509 = 14508
14513 = 14512
14511 = 14510
14500 = 14498
14504, 14494, 14499, 14493, and 14497 belong here.
14503, 14501, 20074, 20075 = 14504
14496, 14495 = 14494
14318, 14319, 14533, 14532, and 14450 belong here.
14317 = 14318

21285. obscura[1] S. and H. 28-56 Wash.
20077 = var. ? of 14533
14535 = 14533
14453, 20073 = 14450
14449, 20071, 14454, 14523, and 14530 belong here.

Anoplodera Muls. 40-285 *

14531 = 14530
14525a is valid species and belongs here.
20061, 14525, 14526, 14447 belong here.
14524 = 14447
14448 = 14447
14448a and b = 14447

21286. planata[1] S. and H. 28-62 Iowa
14522, 14520, 14438, 14439, and 14441 belong here.
14521 = 14520
14519 and 14519a = 14520
14440, 14442, 14443, 14444 = 14441
14445, 14451, 14425, 14466, and 14469 belong here.
14446 = 14445
14433, 14434 = 14425
nitidipennis Prov. = 14469
14532b = 14449
14402 belongs in Acmæops.

Stenocorus *

14334 and 14335 = 14340
14328 and 14330 = 14324
14329 and 14331 = 14323
20053 = 14322

Gaurotes *

14413 = 14412

Acmæops *

14410 = 14407
14402 belongs here.

Leptacmæops *

14374a and 14376 = 14374
14373, 14378, and 14380 = 14383
14385, 14386, 14388, 14389 = 14384
20058, 14393 = 14391

Cyphonotida

14492 belongs in Euryptera, fide S. and H. 28-65

Neobellamira S. and H. 28-15

14565. delicata (Lec.) genotype

Euryptera

14492 belongs here, fide S. and H. 28-65

21287. cruenta Martin 30-70 Ariz.

In addition to the changes noted above the Swaine and Hopping paper on the Lepturini (of which part I was published in 1928) unites the tribes Encyclopini and Lepturini, restores the generic names Toxotus and Stenocorus to the sense formerly used, and makes Strangalia Serv. a synonym of Leptura L., so that Strangalina Aurivillius will replace the old name Strangalia. The changes in generic arrangement of the species, though numerous, appear to accord with studies of wing venation and larvæ. Drawings by Mr. F. C. Hennessey assist in following the text.

* Synonymy fide R. Hopping 28 or S. and H. 28.

Molorchus
14584c. celti Knull 30-101 Pa.
Plinthocœlium Schmidt 24-382
includes 14599, 14600, 14602, 14604
14599b. smaragdinoides Schmidt 24-384
Tex.
Schwarzerion Schmidt 24-387
includes 14603

Anacomis
14614d. thujæ VanD. 27-103 B. C.

Callidium
21288. vancouverense VanD. 27-104
B. C.
21289. pallidum VanD. 28-111 Cal.
21290. hardyi VanD. 28-112 B. C.

Phymatodes
21291. fulgidus G.R.Hopp. 28-246
B. C.
14641a. nigrescens Hardy
and Preece 27-190 B. C.
14645a. latifasciatus Hardy
and Preece 27-191 Vanc.

Cyllene
14667 = infausta Lec.
fide R.Hopp. 28-8
14668a, d, and e = 14668,
color varieties of decora,
fide R.Hopp.

Xylotrechus
21292. bowditchi G.R.Hopp. 28-247
Colo.
21293. schaefferi Schott 25-224
N. J.
20106. abietis VanD. 29-136, n.n.
cinereus || VanD.

Neoclytus
21294. baillaris VanD. 29-136 Wash.
basalis || VanD. 27-106
21295. angelicus VanD. 27-107
Cal.
21296. vanduzeei[1] VanD. 27-107
Ariz.
14711a. zebratus VanD. 27-108
Cal.

Clytoleptus
14732 = 14730, fide Champlain,
Kirk and Knull 25

Clytus
21297. canadensis G.R.Hopp. 28-246
B. C.

Batyle
21298. rufiventris[1] Knull 28-126
Ariz.

Moneilema
21299. corpulentum Knaus 25-183
Ariz.
14877c. montanum Psota 30-121
Mont.
21300. puncticollis Psota 30-121
Colo.N.Mex.
21301. angulatum[1] Psota 30-122
Wash.
21302. hybrida[1] Psota 30-123 Colo.
21303. parahybrida Psota 30-124
N. Mex.
14880a. scabrum Psota 30-125 N. Mex.
21304. alpinum Psota 30-126 Tex. N.Mex.
21305. rinconi Psota 30-126 N. Mex.
21306. texanum Psota 30-127 Tex.
14881b. arizonicum[1] Psota 30-128
Ariz.
21307. duncani Psota 30-128 Ariz.
21308. isolatum Psota 30-132 N. Mex.
21309. punctatum Psota 30-133
Tex.
21310. walsenburgi Psota 30-142
Colo.
21311. nigriventris Fisher 26-214
Tex.
All of Casey's names, except
corrugans, are synonyms,
fide Psota.

Goes
21312. novus Fall 28-236 Tex.
14917a = 14917, fide Fall 28-237
14916 = 14915, belongs in Goes
fide Fall 28-237
14915 occurs in Ga. and N. C.
14920 occurs in N. J., Pa., and R. I.

Synaphæta
14926 and 14927 = 14928,
fide R.Hopp. 28-8

Leptostylus
21313. pusillus Blatch. 25-167
Fla.
21314. bahamicus Fisher 25-3, fide
Champlain and Knull 26-205
Fla.
21315. knulli Fisher 25-103 Md.
21316. scurra v. dorsalis Fisher 26-21
Cuba, Fla.

Lepturges
21317. minutus Champlain
and Knull 25-207 La.
21318. neomexicanus Champlain
and Knull 25-470 N. Mex.

Pogonocherus (Key to species Linsley 30)
21319. vandykei Linsley 30-79
So. Tex.
15051 = 15049
15054 = 15053
15057 = 15055
15058 = 15056
15060 = 15049

Ecyrus (Key to species Linsley 30)
21320. cornutus Linsley 30-86
So. Tex.
15066 is valid Linsley 31-106

Ataxia
21321. brunneus Champlain
and Knull 26-206 No. Ill.

Saperda
21322. bipunctata R.Hopp. 25-208
Man.

Oberea
21323. delongi Knull 28-12 Ohio
21324. brooksi Wallis 26-94 Man.
15136. caseyi n.n. Plav. 27-64
ferruginea || Csy.

* Synonymy fide R. Hopping 28 or S. and H. 28.

CHRYSOMELOIDEA

The publication of Böving and Craighead's "Synopsis of the principal Larval Forms of Coleoptera" indicates the necessity of dividing the series Cerambycoidea, uniting the families Bruchidæ (Mylabridæ) and Chrysomelidæ as a series, Chrysomeloidea. Within that series, on larval characters, the subfamilies of Chrysomelidæ heretofore recognized would become families, Sagrinæ becoming Sagridæ, Donaciinæ Donaciidæ, etc. In the Orsodacnidæ two subfamilies, Orsodacninæ and Zeugophorinæ are indicated as required. The present subfamilies Chlamydinæ, Clytrinæ, Cryptocephalinæ, and Lamprosominæ, become components of a family Camptosomatidæ. In the family Galerucidæ the subfamilies Galerucinæ, Diabroticinæ (formerly the tribe Diabroticini) and Halticinæ are provisionally assembled; but it is stated that "when better studied, the classification of the entire family Galerucidæ will unquestionably be changed."

CHRYSOMELIDÆ

Schaeffer 24, 25, 26, 28, 29; Laboissiere 25, 29; Blatchley 25, 27, 28; Chittenden 25, 27; Gentner 25, 26, 28; Heikertinger 25; Van Dyke 25; Fall 26, 27, 28, 29; Brisley 27, 28; Hatch 27, 28, 31; Blake 27, 28, 30; Spaeth 27; Martin 28.

Donacia

The results of the studies of Schaeffer are best shown by the following new catalogue of the the species. The original catalogue number is preserved for the species of which the status is unchanged; otherwise it is shown in parenthesis.

21325. militaris Lacord. Mass.-Fla.
floridæ Leng (15197)
15202. piscatrix Lacord.
carolina Lacord.
cuprea‖Melsh.
alutacea Lec.
15202a. congener Lec. Ga.Tex.
15199. palmata Oliv.
claudicans Germ.
21326. texana Cr. Tex.La.Fla.
21326a. minor Schffr. 25-72 Mich.-Tex.
15201. rufescens Lacord.
15200. hypoleuca Lacord
20161. edentata Schffr.
20160. parvidens Schffr.
21327. cincticornis Newn. (15198 a)
lucida Lacord.
21327a. tryphera Schffr. 25-81 N.J. Mex.
21327b. tenuis Schffr. 25-82 N.C. Fla. Mich.
21327c. rufipennis Lacord. Can.-Va.
pulchella Lec.
15198. proxima Kby.
15198d. californica Lec. Cal.-B.C.
21328. cærulea Oliv. N.Y.-Md.
episcopalis Lacord (15198 c.)
21329. magnifica Lec. (15198 b.)
Can.-Colo.
15194. hirticollis Kby.
rudicollis Lacord.

Donacia

15196. pubescens Lec.
21330. quadricollis Say N.Y.-H.B.T.
cuprea Kby.
curticollis Knab (15204)
15206. rugosa Lec.
20162. assimilis Lacord. N.J. Md.
glabrata Schffr.
21331. biimpressa Melsh. Can. Fla.
aurichalcea Melsh.
torosa Lec. (15212)
distincta‡Leng
21331a. limonia Schffr. 25-100 N.Y.-Mich.
15207. porosicollis Lacord.
15211. distincta Lec.
15203. subtilis Kunze
ænea‖Ahrens
confluenta Say
æqualis Kby.
ærea Lacord.
confluens Lec.
15203a. fulgens Lec. N.Y.-H.B.T.
20164. tuberculifrons Schffr.
21332. vicina Lacord. Ala.
20163. liebecki Schffr.
pallipes‖Lacord.
15205. megacornis Blatch.
megalocera Weise
15209. aequalis Say
confusa Lacord.
dissimilis Schffr. 25-115
Fla.
15218. rufa Say
tuberculata Lacord. (15210)
rutila Melsh.
15195. pubicollis Schffr.

Donacia

(*Poecilocera* Schffr.)

15208. harrisi Lec.
(*Plateumaris* Thoms.)

21333. sulcicollis Lacord. Can.-Wis.
metallica‡Say
affinis Kby.
kirbyi Lacord.
jucunda Lec.
rufa‡Leng (15218)

15217. flavipes Kby.
chalcea Lacord.

15217a. shoemakeri Schffr. 25-129 N.J. N.Y. D.C. Va.

15217b. lodingi Schffr. 25-129 Ala.

21334. nitida Germ. N.Y.
binodosa Lec. nec Germ.

21335. notmani Schffr. 25-132 N.Y.

15216. emarginata Kby.
junci Coup.

15216a. pacifica Schffr. 25-135 Cal.

15216b. frosti Schffr. 25-136 Mass.-Alta.

15215. metallica Ahrens
femoralis Kby. (15214)
cataractæ Newm.
parva Lacord.
nana Melsh.
indica Melsh.
gentilis Lec.

21336. germari Mann. Nfld.-Cal. Alas.
aurifer Lec.
dives Lec.
femoralis‡Lec.
serricauda Schffr. (20165)

21336a. flavipennis Mann. Oreg.-Alas.

21337. diversa Schffr. 25-143 Ind. Wis. Ont.
harrisi‡Blatch.

21338. fulvipes Lacord. Alta.-Pa.
cuprea‡Lec.
pusilla‡Leng (pars)

15213. pusilla Say
rugifrons Newn.

15213a. pyritosa Lec.

15213b. robusta Schffr.

21339. wallisi Schffr. 25-147 Man. Mich.-Alas.
aurifer var. Lec.

21340. dubia Schffr. 25-152 Wyom.-Alas.

21341. neomexicana Schffr. 25-154 N.Mex.

21342. longicollis Schffr. 25-156 B.C.-Nev.

21343. vermiculata[1] Schffr. 25-158 Cal.

Syneta

15221a. minuta Brisley 27-60

Thricolema

a distinct genus Brisley 27-56

Zeugophora

atra Fall. 26-203 n.n.
for abnormis‡Cr. nec Lec.

Crioceris

according to Hatch 27-211:
incrucifer Pic 06-119-123 Mich.
4-punctata Schust. " "
linnei Pic " "
anticeconjuncta Pic " "
apiceconjuncta Pic " "
impupiliata Pic " "

Lema

15253b. nigriventris Fall 28-238 Cal.
20169 = 15255, fide Fall 28-238
15255 is subsp. of 12253, Brisley 28-118

15257. californica n.n. Heinze 27-142, for aemula‖

Coscinoptera

21344. inornata Fall 27-382 L.Cal.

Euryscopa

21345. alicula Fall 27-383 L.Cal.

Saxinis

21346. microstriga Fall 27-384 Ariz. Mex.

Chlamys

(*Boloschesis* Jacobson 24-239)
(*Arthrochlamys* Ihering, Rev. do Mus. Paulista VI, 1904, p. 642)
(cf. Laboissiere 29-256)

21347. subelata Schffr. 26-184 Ariz. Cal.

21348. scabripennis Schffr. 26-184 Tex. N.Mex. Ariz. Cal.

21349. quadrilobata Schffr. 26-186 Tex.

20173. = mœstifica Lac.

Monachulus

21350. viridanus Fall 27-139 Fla.

Bassareus

21351. clathratus Melsh. valid sp. fide Blatch. 28-71

Metachroma

21352. insulare Fall 27-390 L. Cal.

21353. opacipenne Fall 27-138 L. Cal.

21354. coronadense Fall 27-138 Cal.

21355. anaemicum Fall 27-138 Fla.

15588. = adustum Suffr. 66-339, fide Blake 30-214

Typophorus

15625a. sturmi Lef. is subsp., fide Chittenden 25-91

Paria

21356. juniperi Blatch. 27-143 Ind.

Colaspidea

20188 occurs in Cuba, fide Blatch. 28-49

Hydrothassa Thoms. 66-279

21357. boreela Schffr. 28-289 Man. Alta. B.C.
15636, 15637, 15638, also belong here

Calligrapha

15675a. confluens Schffr. 28-290 N.S.-Mass.
21358. alni Schffr. 28-290 N.S.-Mass.

Phædon *

15695. prasinella (Lec.) 61-358 Wash.-So.Cal.
punctatus Hatch 28-46, Fall 29-145 Wash.
vandykei Hatch 28-61, Fall 29-145 Cal.
15696. purpurea Linell 98-482, Fall 29-151 Ut. Ariz.
purpurescens Hatch 28-61, Fall 29-150 Ariz.
15698. oviformis (Lec.) 61-457, Fall 29-151 N. Eng.-Alas.
? vancouverensis Hatch 28-62, Fall 29-151
15699. viridis (Melsh.) 47-175, Fall 29-149 Que. Fla. N.Mex.
æruginosus Suffr. 58-395, Fall 29-149 N. Am.
microreticulatus Hatch 28-46, Fall 29-148 N. Y.
dietrichi Hatch 28-46, Fall 29-148 N. Y.
? oklahomensis Hatch 31-103 as variety Okla.
15697. armoraciæ (L.) 58-369, Fall 29-152 Eur. N. Am.
? americanus Schffr. 29-287, and Fall i. litt. Mich.
21359. niger Hatch 28-47 Wash.
planus Hatch 31-104, and i. litt.
21360. carri Hatch 28-46, Fall 29, and Schffr. 29 Que.-Alta.
? cochleariæ Fall nec Fab., fide Schffr. 29
21361. uniformis Fall 29-150 Mass. N.J. Ga.
21362. cyanescens Stål 60-470, Fall 29-150 Mex. Ariz.
huachucæ Hatch 28-62 Ariz.

Gastroidea

(*Gastrophysa* Redt.)
21363. formosa (Say) is valid, fide Schffr. 28-45
15705 = Nodonota puncticollis Lef. 28-45

Lina

21364. interrupta Fab. 01-438
21364a. 4-guttata Schffr. 28-43 Alta.
21364b. aeneicollis Schffr. 28-43
15710c. maculicollis Schffr. 28-44 Ut.
15711a. scriptoides Schffr. 28-44 N. J.

Phyllodecta

21365. americana Schffr. 28-46 Pa.
21365a. pallipes Schffr. 28-47 Ohio.

Triarius

21366. suturalis Martin 28-34 Ariz.

Diabrotica

cf. Lever 30-656, and Labolssiere 25

Luperodes

21367. bimarginata Blake 28-143 N. C.

Oedionychis

15871a. lamprocyanea Blake 27-11 Ariz. Colo.
15868a. badia Blake 27-14 Va.
scripticollis Say = 15868, fide Blake 27
15875b. pallida Blake 27-27 Tex. Okla.
21368. amplivittata Blake 27-24 N.Am.(U.S.?)
21369. spilonota Blake 27-36 Fla.
21370. obsidiana (Fab.) 01-499
21370a. blakeæ n.n. flava ‖ Blake 27-40 nec Gmelin Ala. Ill. Kan.
21371. discicollis Cr. 73-61 Fla.
21372. lateralis Jac. 86-412 Ariz.
21373. durangoensis Jac. 92-318 Ariz.
15886. circumdata Rand. replaces limbalis Melsh.
21374. subvittata Horn is valid, fide Blake 27
15889. quercata (Fab.) reidentified, fide Blake 27
15872. gracilis is syn. fide Blake 27
Harold's names, jocosa, horni, longula not identified

Disonycha, fide Blake 30-210

15895e (= costipennis Duv.) is valid Fla. Cuba.
15895 is valid E. of Miss. So. St.
15895d is valid Fla.
21375. uniguttata (Say) is valid U.S. E. of Rockies
15895a is valid Cal.
15895b. (= procera Csy.) is valid E. of Rockies
vicina Kby. remains doubtful
15902a is valid fide Blatch. 30-43

Haltica

15937 = tombacina Mann., fide Fall 26-204
21376. cupreolus Fall 26-204 n.n. for tombacina ‡ Horn
21377. vitiosa Blatch. 28-71 Fla.
21378. brisleyi Gentn. 28-59 Ariz. Colo. Neb.
21379. nigra[1] Gentn. 28-61 N. Mex.
15925. aeneola n.n. Blatch. 25-245, for ænescens ‖
21380. canadensis Gentn. 26-149 Man.
21381. elongata Gentn. 26-151 Man.

* We have included, in treating Phædon, Hatch's paper of 1911 in which he disputes in part the synonymy of Fall's paper of 1929, and describes **planus**. This name he later, in a letter to us, treated as an aberration. We have included also a letter from Fall, disputing Schaeffer's conclusions, in part.

Chalcoides

15968. Following Heikertinger 13-155, Schæffer 24-145, Chittenden 25-120, the helxines of Linné is question-ab.e or unrecognizable. The arrangement of names, fide Chittenden, ls
fulvicornis (Fab.) 92-30 Eur. N.Am.
subsp. nana Say
subsp. violacea Melsh.

Crepidodera

21382. solani Blatch. 25-167 Fla.

Leptotrichaltica Heikertinger 25-68 (*Leptotrix* Horn nec Meyer 1868)

Chætocnema

21383. parvula[1] Gentn. 28-62 Ariz.
21384. bicolor Gentn. 28-63 Ariz.
21385. magnipunctata Gentn. 28-64 So. Cal.

Systena

21386. floridana Blatch. 28-72 Fla.

Longitarsus

21387. waterhousei Kutschera 64-274 Eur.Mich.Ind.
(Wien. Ent. Monatschr. Vol. VIII)
menthæ (Bedel) 98-189
menthæ ‖ Gentn. 25-109
menthaphagus Gentn. 26-152 and 28-264
21388. ovalis Gentn. 26-153 Nfld.

Glyptina

21389. maritima Fall 27-140 Mass.

Aphthona

21390. schaefferi Blatch. 27-144 Fla.

Phyllotreta as arranged by Chittenden 27

16075. armoraciæ (Koch) 03-75 † Eur.Que.-Neb.
vittata Steph. 31-297
16075a. biplagiata[1] Chitt. 27-16 Wis.
16064. lepidula (Lec.) 57-68 Cal.
16067. oregonensis (Cr.) 73-66 Or.-Tex.
16068. robusta Lec. 78-614 Mich.-Man.
16065. zimmermanni (Cr.) 73-66 N. Eng.-Man.
sinuata ‡ Horn 89-295
20245. utana Chitt. 20-389 Ut.-Oreg.
16066. vittata (Fab.) 01-469 † Eur. N.Eng. Cal.
striolata (Fab.) 07-148
sinuata ‡ Redt.
16066a. discedens Weise 93-873 Fla. Tex. D.C.
16066b. monticola Weise 93-873 † Eur. Cal. D.C.
16066c. lineolata Chitt. 27-25 Ala.-Alas.
16066d. vernicosa[1] Chitt. 27-25 Cal.
16066e. artivitta[1] Chitt. 27-26 Ia.
20243. liebeckl Schffr. 19-439 Fla. Md. Ill.
21391. alberta Chitt. 27-28 Alta.
21392. perspicua[1] Chitt. 27-29 Oreg.

* Variety of bipustulata, fide Chitt. 27.

Phyllotreta

21393. obtusa[1] Chitt. 27-30 Colo.
21394. oblonga Chitt. 27-31 Alta.
16073. ramosa (Cr.) 74-80 Cal. Nev. N.Y.
16074. bipustulata (Fab.) 01-464 N.Y. Wis. Kan.
20244. conjuncta Gentn. 24-168* Mich. Wis. Kan.
16069. denticornis Horn 89-297 Cal. Oreg.
21395. amplicornis[1] Chitt. 27-35 ?
16070. ulkei Horn 89-298 Ohio.
16071. decipiens Horn 89-298 Or.Mont.B.C.
16071a. ordinata Chitt. 27-38 Nev.-Wash.
16072. albionica (Lec.) 57-68 Colo-B.C.
16072a. corusca[1] Chitt. 27-40 B.C.
21396. herbacea Chitt. 27-41 Colo.
21397. prasina Chitt. 27-42 Cal.Ariz.Tex.
16076. chalybeipennis (Cr.) 73-67 Mass.-Fla.
16078. æneicollis (Cr.) 73-67 Tex.-S.Dak.
16077. lewisii (Cr.) 73-66 Md.-Oreg.
21398. columbiana Chitt. 27-46 B.C.
21399. subnitida Chitt. 27-47 Cal.-N.Mex.
21400. ærea Allard 59-c †Eur. N.Y.
punctulata Foudras 60-255
21401. inconspicua Chitt. 27-49 Alta-Wash.
21402. fulgida Chitt. 27-50 Colo.-Cal.
21403. transversovalis[1] Chitt. 27-51 Ut.
21404. brevipennis Chitt. 27-52 Man.
16080. pusilla Horn 89-302 Colo.-Cal.
21405. laticornis Chitt. 27-54 Ariz.
21406. viridicyanea Chitt. 27-55. Cal.
21407. polita Chitt. 27-56 Oreg.
21408. inordinata Chitt. 27-57 Tex. Ariz.
20242. undulata Kutsch. 60-301 ? N.Am.
16079. lindahli Dury (in Tanygaster?)
16081. picta (Say) in Trachymetopa Weise, fide Heikertinger 25-58

Anisostena

21409. californica VanD. 25-170 Cal.

Brachycoryna

21410. dolorosa VanD. 25-170 Cal.
16117. =hardyi Cr. fide VanD. 25

Microrhopala

16131c. militaris VanD. 25-173 Cal.

Chelymorpha

21411. phytophagica Cr. 73-77 is valid Ariz.

Physonota

16142b. arizonæ Schffr. 25-234 Ariz.
21412. helianthi Rand. is valid fide Criddle 26-208

Cassida

21413. relicta Spaeth 27-114 Ill.

Deloyala
16155a. diversicollis Schffr. 25-235 Tex. Ariz.

Metriona
16157b. floridana Schffr. 25-235 Fla.
21414. marginepunctata Schffr. 25-236 Ala.
21415. lodingi Schffr. 25-236 Ala.

Coptocycla
21416. pinicola Schffr. 25-235 Ala.

MYLABRIDÆ

On larval characters two subfamilies, Pachymerinæ and Bruchinæ are suggested by Böving and Craighead.

Caryobruchus Bridwell 29-148
New genus proposed for 16163 and 16164

Mylabris
21417. wheelocki Blatch. 30-35 Fla.
21418. prolixus Fall 26-204 Alas.

Spermophagus
cf. Bridwell 30-29 on status of robiniæ Fab.

BRENTIDÆ

Kleine 27.

Platystrophus Kleine 17-39
This generic name is proposed for Eupsalis and the varieties lecontei and sallei are treated by Kleine as valid, without explanation.

Brentus
16260 = mexicanus Boh. 40-532

PLATYSTOMIDÆ

(ANTHRIBIDÆ) (CHORAGIDÆ)

This family is treated under the name Choragidæ in Bradley's Manual. Several nomenclatorial changes are made by Pierce 30; in the same paper keys to several genera by Barber and Buchanan are printed, as well as other keys by Pierce.
Wolfrum, in Col. Cat. parts 102 (1929) restores the family name Anthribidæ, makes two subfamilies, and submerges the genera Gonops and Toxotropis in Ormiscus.
Böving and Craighead, on larval characters, elevate the rank of the family to a series, Platystomoidea, divided into two subfamilies, Brachytarsinæ (legs present) and Choraginæ (legs absent) in larval stage.

Meconemus Labram and Imhoff 38-51, fide Pierce
(*Ischnocerus* Schön.)
21419. angulata Martin 30-71 Ariz.

Toxotropis Key, Pierce 30
(*Gonops* Lec.) fide Pierce
21420. simplex[1] Pierce 30-8 Ga.
21421. sparsus[1] Pierce 30-9 Tex.
21422. 4-maculatus Pierce 30-9 Fla.-D.C.
21423. mitchelli Pierce 30-10 Tex.
21424. victoriensis Pierce 30-11 Tex.

Ensphyrus
21425. schwarzi Pierce 30-28 Fla.

Discotenes Labram and Imhoff 38-51, fide Pierce
(*Phanosolena* Schffr.)

Ormiscus
21426. angulatus Pierce 30-6 Tex.
21427. solidus[1] Pierce 30-7 Tex.

Eurymycter Key, Pierce 30
21428. latifascia Pierce 30-17 N.Y. Ont.
21429. bicarinatus[1] Pierce 30-17 Wash.
21430. tricarinatus Pierce 30-17 N.C.-Wis.

Tropideres
21431. barberi Pierce 30-13 Tex.
Allandrus Key, Barber 30
21432. populi Pierce 30-19 Ariz. Ut. Id. Mich.

Piezocorynus Key, Buchanan 30
16288. =plagifer Jordan 04-277, fide Pierce

Pseudanthribus Pierce 30-24 (*Anthribus* Geoff.)

Brachytarsus
21433. annulatus Carr 30-279 Alta.

Brachytarsoides Pierce 30-29
n. gen. for 16310 and others

Euxenus
21434. ater[1] Blatch. 30-238 Fla.

CURCULIONOIDEA

The series Brentoidea, Curculionoidea, and Scolytoidea are consolidated by Böving and Craighead on larval characters. They state that the larvæ of Curculionidæ and Scolytidæ "cannot be separated." The submerged larvæ of Lissorhoptrus, living between the leaves of rice, lead to their separation as a subfamily Lissorhoptrinæ. The families suggested are Belidæ, Brentidæ, Attelabidæ (including Rhynchitinæ = Cimberinæ and Attelabinæ) Apionidæ, Curculionidæ, Calendridæ, Platypodidæ, and Scolytidæ.

CURCULIONIDÆ

Fall 25, 26, 27, 28, 29; Chittenden 25, 26, 28, 30; Blatchley 25, 28; Pierce 25; Satterthwait 25; Fisher 25; Voss 25; Buchanan 26, 27, 29; Barber 26; Van Dyke 27, 28, 29, 30; Cotton 27; Carr 29, 30; Brown 29, 30; Ryan 29; Frost 30; Crosby and Blauvelt 30; Mutchler 30; Bradley 30.

Diodyrhynchus (in subfamily Cimberinæ, fide Bradley 30-259)
21435. slevini Martin 30-130 Cal.

Rhynchites
21436. quadripennis Fall 29-292 Tex.
21437. delectus Fall 29-292 So.Cal.
16357a. levirostris[1] Fall 29-293 Cal.
21438. insularis Fall 29-293 Cal. Is.

Attelabus
(*Himatolabus*)
21439. constrictipennis Chitt. 26-163 Ariz.
21440. disparipes Chitt. 26-164 Ariz.
21441. coloradoensis Voss 25-244 So.Colo.
(*Pilolabus*)
21442. californicus Voss 25-243 Cal.
According to Col. Cat. pars 110:
16365a. is a synonym of 16365; the synonymy under 16369 is to be reversed; the subgenera are Pilolabus for californicus, Himatolabus for 16369, Synolabus for 16366, 16367 and 16368, Cyrtolabus for Chittenden's species, and Homœolabus for 16365

Apion
21443. alaskanum Fall 26-205 Alas.
21444. dilaticolle Fall 25-85 N.J.
21445. bischoffi Fall 25-86 N.Y. N.J. Va.
atripes‡Fall, 98 nec. Smith

Apion
21446. diffractum Fall. 25-87 N.J. Mass. Id.
21447. speculiferum Fall 27-140 Alta.
21448. cyanitinctum Fall 27-141 Man.

Eupagoderes
21449. giganteus Chitt. 26-169 Cal.

Dichoxenus
16548 belongs here, fide Buchanan 27-184

Calomycterus
21450. setarius Roelofs 73-175, fide Mutchler 30-1 N.Y.

Panscopus Key, Buchanan 27
(*Nomidus*)
21451. schwarzi Buch. 27-30 Ut.
21452. rugicollis[1] Buch. 27-31 Wash.
21453. bufo[1] Buch. 27-31 Cal.
21454. pallidus Buch. 27-31 B.C. Id. Mont.
21455. tricarinatus[1] Buch. 27-32 Oreg.
(*Pseudopanscopus* Buch. 27-33)
21456. costatus[1] Buch. 27-33 B.C.
16575=16636, fide Buch.
16584a=16584, fide Buch.
16586=16576, fide Buch.
Panscopidius=Nocheles, fide Buch.

Pantomorus
16659. =godmani Cr. fide Bradley 30-262

Mesagroicus Schön. 40-281
(*Lepidocricus* Pierce) fide Buchanan 29
21457. minor Buch. 29-6 Ohio-Colo.
21458. oblongus Buch. 29-8 Neb.-Wyom.
21459. plumosus Buch. 29-9 Tex.
21460. elongatus Buch. 29-10 Oreg.
21461. nevadianus Buch. 29-11 Nev.
21462. incertus Buch. 29-11 Wash.
21463. hispidus Buch. 29-12 Cal.
21464. strigisquamosus Buch. 29-13 Cal.
21465. ocularis Buch. 29-13 Cal.

Trigonoscuta
16695=16673 fide Buch. 27-184

Brachyrhinus cf. Chitt. 25-290, and Buch. 27-183
21466. cribricollis Gyll. 34-582 fide VanD. 29-8 and Ryan 29-567 Cal.

Agronus
21467. carri Buch. 29-102 Alta.

Eucilinus (Simoini) Buch. 26-179
21468. mononychus Buch. 26-180 Ut. Ariz.

Trichalophus
21469. brunneus[1] VanD. 27-15 Wash.
21470. foveirostris Chitt. 25-141*

Acmægenius
21471. granicollis[1] VanD. 27-14 Wyom.

Lepidophorus
21472. rainieri VanD. 30-149 Wash.
21473. alternatus VanD. 30-150 Wash. Or.

Desiantha (*Hyperini*) Pasc. 70-193
21474. nociva Lea 09-174 fide Blatch. 25-92 †Miss.

Lepyrus Key to sp. Van D. 28-57
21475. nordenskioldi Faust 87
21475a. canadensis Csy.
21475b. cinereus VanD. 28-57 Alas.
21476. oregonus Csy.
21476a. tesselatus VanD. 28-56 Alta.

Listronotus
21477. impressus VanD. 29-106 Cal.
21478. elegans VanD. 29-107 Cal.
21479. leucozonatus Chitt. 26-341 O. Fla. N.Y.
(*Listroderes*)
21480. apicalis Waterh. 41-123, fide Chitt. 26-71

Hyperodes
21481. annulipes Blatch. 25-92 Fla.
21482. carinatus Blatch. 28-242 Fla.
16810=16834. fide Fall 26-206
vitticollis‡Dietz=16835a, fide Fall 26-206

Pissodes
21483. robustus VanD. 27-11 Cal.
21484. ochraceus VanD. 27-12 Cal.

Anculopus Van D. 27-12
21485. foveatus VanD. 27-13 Wash.

Notaris
21486. flavipilosus Chitt. 30-48 Alas.
21487. goliath Buch. 27-38 Nev. Oreg.
16923=bimaculatus Fab., fide Buch. 26-36

Smicronyx
21488. minutissimus[1] Blatch. 28-244 Fla.

Tanysphyrus
21489. atra[1] Blatch. 28-244 Mass.

Bagous
21490. carinatus Blatch. 25-95 Fla.

Myrmex
(*Otidocephalus*)
21491. ventralis[1] VanD. 30-151 Tex.
21492. dimidiatus[1] VanD. 30-152 Tex.
21493. octolineatus Champ. 03-242 fide VanD. 30-153 Ariz.

Curculio ** L. 58 377-386.
(*Balaninus* Germ.)
Arranged as follows by Chittenden, 1927:
*
17155. proboscideus Fab. E.U.S.
17177. auriger Csy. E.U.S.Ariz?
**
17159. nasicus Say E.U.S. Tex.
17156. caryæ Horn E.U.S. Tex.
17157. rectus Say E.U.S. Tex.
21494. macrodon[1] Chitt. 27-154 Tex.
21495. longidens Chitt. 27-155 Mass. Fla. Tex.
21496. ruficristatus[1] Chitt. 27-156 Tex.
***
21497. orthorhynchus Chitt. W. Va. N.J.-Tex.
21498. longinasus[1] Chitt. 27-158 Ariz.
21498a. mandibularis Chitt. 27-158 Ariz.
21499. multifasciatus[1] Chitt. 27-159 Wis.
21500. pardus Chitt. 27-160 So.Cal.
21501. gracilis Chitt. 27-161 Ariz.
21502. wenzeli Chitt. 27-161 W. Tex.
****
17160. pardalis Chitt. E.U.S. Tex.
17176. victoriensis Chitt. Tex.-S.C.
17176a. fulvus Chitt. 27-165 S.C.-Ala.
21503. emarginatus Chitt. 27-165 N.Mex.
17170. strictus Csy. N.J. Ut.
*****
17175. q-griseæ Chitt. Ariz.
17161. confusor Ham. E.U.S. Dak.
17167. uniformis Lec. Cal. Ut. B.C.
21504. parvidens Chitt. Gulf. St. N.C.
17162. baculi Chitt. E.U.S. Tex.
17162a. curtus Chitt.

* Referred to Plinthodes Van D. 27-15.
** Curculio nucum designated as type by Latreille 1810, fide Pierce Proc. Ent. Soc. Wash. 1925, pp. 113-114.

Curculio

21505. cervulinus Chitt. 27-174 Cal.
17169. undulatus Csy. Ariz.
21506. microdon Chitt. 27-175 Tex.
21506a. rectitibialis Chitt. N.Mex.
******
17164. obtusus Blanch. E.U.S. Can. Tex.
21507. numenius Chitt. 27-178 Can.-Colo.
21508. funicularis Chitt. 27-179 N.Mex.Can.
21509. iowensis Csy. (17161a.) N.Y. Wis. Tex.
21510. ibis Chitt. 27-181 Ariz.
21511. exilis[1] Chitt. 27-182 Can.
****
17166. monticola Csy. W.Tex. N.Mex.
21512. crassirostris Chitt. 27-184 Ariz.
21513. aurivestis[1] Chitt. 27-185 Cal.
21514. brevinasus Chitt. 27-185 Cal.
17168. nanulus Csy. N.Mex.
21515. striatus Chitt. 27-187 W.Tex.
17163. humeralis Csy Fla.
21516. albidus Chitt. 27-189
? haroldi Faust 90-292, fide Chitt. 28-69 China N.Am?
17155a, 17155b = 17155
17158, 17177a, 17178, 17179 = 17177
auctus Csy. = 17159
sparsus Gyll. rostratus Gyll., and nasatus Say = 17159?
appalachius Csy. = 17160
17173, 17171, 17172, and ordinatus Csy. = 17170
proprius Csy. = 17175
17165 = 17167
17180 = 17166
17174 = 17168

Anthonomus

(*Coccotorus*)

21517. pruniphilus Chitt. 25-130 Tex.

(*Anthonomus*)

21518. nubiloides Fall 28-239 Me. and West
21519. australis Blatch. 25-98 Fla.
21520. bicorostris Blatch. 25-97 Fla.
17239a. picipes[1] Blatch. 28-249 Ill.
17267. xantus Blatch. 25-99 = 17267 fide Fall 28-238 Mass.
? 17312 = 17273, fide Fall 28-230. denied Blatch. 30-41

Epimechus

21521. flavirostris Fall 28-239 So.Cal.

Orchestes

21522. uniformis Brown 29-110 Mal.
21523. testaceus Mul. 76-90 fide Frost 30-97 Me. N.S.
17345a. is valid species, occurs in Quebec, fide Brown 30

Cleonus

21524. piger Scop. 63-23, fide Crosby and Blauvelt 30-164 N.Y.

Lixus

21525. novellus Blatch. 25-101 Ind.
21526. pusio[1] Blatch. 28-250 Fla.
21527. blakeæ Chitt. 28-90 Cal.
21528. albisetiger Chitt. 30-2 Tex.
21529. aspericollis Chitt. 30-3 Kan.
21530. coloradensis[1] Chitt. 30-4 Colo.
21531. perstriatus Chitt. 30-5 Colo.
21532. acirostris Chitt. 30-6 N.C.
21533. ordinatipennis[1] Chitt. 30-7 La.
21534. quadratipunctatus[1] Chitt. 30-8 Colo.
17425a. profundus Chitt. 30-9 Ga.-Tex.
21535. crassipunctatus[1] Chitt. 30-9 Ariz.
21536. ivæ Chitt. 30-10 La.
21537. dissimilis Chitt. 30-11 Ga.
21538. tricristatus Chitt. 30-12 N.Y. Ala. Kan.
21539. planicollis Chitt. 30-13 Ia. La.
21540. pervestitus Chitt. 30-14 Ariz. N.Mex.
21541. flexipennis[1] Chitt. 30-15 Ia.
21542. buchanani[1] Chitt. 30-16 Ia.
21543. plucheæ Chitt. 30-17 Tex.
17437a. ocellatus Chitt. 30-18 N.Y. N.J.
21544. capitatus[1] Chitt. 30-19 Md.
21545. lodingi Chitt. 30-20 Ala. Fla. La.
21546. regularipennis Chitt. 30-21 Ind. D.C. La.
21547. cleonoides[1] Chitt. 30-22 Tex.
21548. mephitis[1] Chitt. 30-23 S.C.
21549. elephantulus[1] Chitt. 30-24 Ill.

Baris

21550. seminola[1] Blatch. 28-251 Fla.
21551. palmensis[1] Blatch. 28-252 Fla.

Geræus

(*Centrinaspis* Csy.) (type 17582)

21552. argentis Blatch. 25-102 Ind.
21553. bracatoides[1] Blatch. 28-253 Fla.

Limnobaris

(*Anacentrus* Csy.) (type 17622)

21554. vicarius Blatch. 28-254 Fla.

(*Sibariops* Csy.) (type 17637)

21555. pellax[1] Blatch. 28-255 Fla.

Barinus

20601 belongs here, fide Fall 28-240

Cylindrocopturus *

21556. medicatus Carr 29-134 Alta.
21557. vanduzeei VanD. 30-153 Cal.
21558. crassus VanD. 30-154 Cal.
21559. hemizoniæ VanD. 30-155 Cal.
21560. cretaceus VanD. 30-155 Ariz.
21561. unicolor VanD. 30-156 Cal.

Ceutorhynchus

21562. fulvotertius Fall 26-206 Alas.

Perigaster

21563. alternans[1] Blatch. 28-256 Fla.

Acanthoscelidius n. n. Dalla Torre and Hustache
(*Acanthoscelis*‖Dietz nec Dej.)

Ceutorhynchus

21564. æratus Dietz is valid, fide Col. Cat. pars 113**
21565. hirtellus Dietz is valid, fide Col. Cat. pars 113
21566. hamiltoni Dietz is valid, fide Col. Cat. pars 113
21567. rubidus Gyll. 37-484 Miss.

Auleutes

21568. epilobii Payk. is valid, fide Col. Cat. pars 113 N.Am. Sib. Eur.

Conotrachelus

21569. cinereus[1] VanD. 30-158 Tex.
21570. asperatus[1] VanD. 30-159 Ariz.
21571. setiferous[1] VanD. 30-160 Ariz.
21572. nigromaculatus VanD. 30-161 Ariz.
21573. retusus Fall 29-59 Fla.

Ryssematus

21574. beutenmuelleri[1] VanD. 30-161 N.C.
21575. arizonicus VanD. 30-162 Ariz.
21576. acutecostatus Champ. fide VanD. 30-163 Ariz.

Chalcodermus

21577. martini[1] VanD. 30-163 Ariz.

Cophes Champ. 05-515

21578. gibbus Champ. 05-517, fide VanD. 30-164 Ariz.

Euscepes

21579. deceptus[1] Blatch. 25-106 Fla.

Micralcinus

21580. kalmbachi Buch. 27-169 La.

Gerstæckeria

21581. doddi Fisher 25-426 Tex.

Apteromechus

21582. microstictus Fall 25-88 and 123 Fla.
21583. texanus[1] Fall 25-88 Tex.

Thecesternus

18005 is an aberration of 18002, fide Col. Cat. pars 106

Trichacorynus

21584. sulcirostris[1] Blatch. 28-259 N.J.

Phlœophagus

21585. californicus VanD. 27-16 Cal.
21586. canadensis VanD. 27-17 Alta.

Pseudopentarthrum

21587. fraternum Blatch. 28-260 Fla.

Pentarthrinus

21588. dissimilis Blatch. 25-108 Fla.

Calendra Clairv. 98-62
(=*Sphenophorus* fide Pierce 19-26)

21589. sequoiæ VanD. 30-165 Cal.
21590. multilineatus Satt. 25-269 Minn.
21591. medorænsis Satt. 25-270 Kan.

Myocalandra

21592. elongata Roelfs., 75-187 fide Cotton 27-93

SCOLYTIDÆ

Sphærosinus Eggers 29-40

21593. striatus Eggers 29-41 N.Am.

Polygraphus

21594. hoppingi Sw. 25-51 Ariz.

Hylastes

21592. yukonis Fall 26-207 Yukon

* This genus and Eulechriops are not Zygopini, fide Barber 26-53.

** In this catalogue, besides the changes noted above, the tribe Ceutorhynchini is treated as a subfamily divided into tribes Mononychini, Coeliodini, and Ceutorhynchini. In the latter 17844 is referred to Eubrychius Thoms. with 17846 as a synonym, 17827, 17829, 17831, 17832, 17833, 17834, and 17845 are placed in Phytobius, and Cœlogaster Dietz is restored.

Pityophthorus

21596. aplanatus Schedl 30-195 Alta.
21597. varians Schedl 30-196 N.S.
21598. watsoni Schedl 30-197 N.B.
21599. boycei Sw. 25-192 Cal.
21600. rugicollis Sw. 25-193 N.Mex.
21601. carinulatus Sw. 25-193 N.Mex.
21602. elongatus Sw. 25-194 = 20673 fide Blackm. 28-133 B.C.
21603. cutleri Sw. 25-195 B.C.
21604. borealis Sw. 25-195 Arctic Can.
21605. gracilis Sw. 25-195 Oreg.
21606. exilis Sw. 25-196 Oreg.
21607. tenuis Sw. 25-196 B.C.
21608. scalptor Blackm. 28-30 Cal.
21609. anceps Blackm. 28-31 Colo.
21610. fuscus Blackm. 28-32 Mont.
21611. aquilus Blackm. 28-33 Ariz.
21612. absonus Blackm. 28-35 Cal.
21613. crinalis Blackm. 28-41 Md. Fla. Mich.
21614. juglandis Blackm. 28-42 N.Mex. Ariz.
21615. inquietus Blackm. 28-46 N.Mex.
21616. monophyllæ Blackm. 28-47 Cal.
21617. socius Blackm. 28-48 Cal. N.Mex.
21618. abietis Blackm. 28-49 Ut. Ariz. N.Mex.
21619. albertensis Blackm. 28-50 Alta.
21620. exiguus Blackm. 28-51 Colo. Ariz.
21621. segnis Blackm. 28-52 Ariz. N.Mex.
21622. idoneus Blackm. 28-55 Idaho
21623. hopkinsi Blackm. 28-56 Cal.
21624. ponderosæ Blackm. 28-57 N.Mex. Ariz.
21625. tumidus Blackm. 28-58 Cal.
21626. solus[1] Blackm. 28-64 Ariz.
21627. comosus Blackm. 28-65 N.Mex. Ariz.
21628. crassus Blackm. 28-67 N.Mex. Colo. Ariz.
21629. cognatus Blackm. 28-69 N.C.
21630. durus Blackm. 28-70 Ariz.
21631. schwarzi Blackm. 28-71 N.Mex.
21632. demissus Blackm. 28-74 Mont. Ut.
21633. venustus Blackm. 28-75 Ariz. N.Mex. S.D.
21634. artifex Blackm. 28-76 Cal.
21635. setosus Blackm. 28-77 Cal.
21636. cælator Blackm. 28-78 S.D. Colo. Ariz.
21637. opimus Blackm. 28-80 N.Mex. Colo.
21638. brevis Blackm. 28-81 Ariz. N.Mex.
21639. angustus Blackm. 28-83 N.Y.
21640. concavus Blackm. 28-85 Mich. Me.
21641. mundus Blackm. 28-86 N.H. N.Y.

Pityophthorus

21642. modicus Blackm. 28-94 N.Mex. Ariz.
21643. navus Blackm. 28-95 Cal.
21644. novellus Blackm. 28-96 Cal.
21645. immanis Blackm. 28-98 Ariz. N.Mex.
21646. cascœnsis Blackm. 28-99 Me.
21647. tonsus Blackm. 28-101 Mich. N.H.
21648. ornatus Blackm. 28-102 Colo.
21649. infulatus Blackm. 28-103 N.Mex.
21650. mollis Blackm. 28-104 N.Mex. Ariz.
21651. hubbardi Blackm. 28-105 Ariz.
21652. blandus Blackm. 28-107 Cal. Ariz.
21653. barberi Blackm. 28-112 N.Mex. Colo. Ut.
21654. jeffreyi Blackm. 28-113 Cal.
21655. grandis Blackm. 28-119 Ariz. Wyom.
21656. bellus Blackm. 28-123 W.Va.-Tex.
21657. ingens Blackm. 28-124 Ariz.
21658. agnatus Blackm. 28-125 N.Mex. Tex. Ariz.
21659. comptus Blackm. 28-127 Ariz.
21660. depygis Blackm. 28-128 Colo.
21661. burkei Blackm. 28-129 Cal. Id.
21662. clarus Blackm. 28-130 Ariz.
21663. acutus Blackm. 28-134 Ariz. N.Mex.
21664. citus Blackm. 28-137 Ariz. N.Mex.
21665. solers Blackm. 28-138 N.Mex. Ariz.
21666. electus Blackm. 28-140 Oreg.
21667. kenti Blackm. 28-141 Wyom.
21668. fortis Blackm. 28-142 Tex. Colo.
21669. virilis Blackm. 28-143 N.Mex. Colo.
18430a. australis Blackm. 28-94 Ariz.
18425b. hamamelidis Blackm. 28-39 W.Va.
18425c. acerni Blackm. 28-39 W.Va.
18447 (= 18445) fide Blackm. 28-131
18434 (= 18433) fide Blackm. 28-108
18431 (= 18435) fide Blackm. 28-97
18437 (= 18438) fide Blackm. 28-72
18450 belongs in Ambrosiodmus
18449 belongs in Pityoborus
= 18451 fide Blackm. 28-146

Pityoborus

21670. secundus[1] Blackm. 28-146 Ut.

Pityophilus Blackm. 28-147

21671. barbatus Blackm. 28-147 N.Mex. Ariz.

Myeloborus Blackm. 28-16
18421 etc. belong here
21672. amplus Blackm. 28-18 Ariz. N.Mex.
21673. keeni Blackm. 28-19 Cal.
21674. pinguis Blackm. 28-20 Colo.-Ariz.
21675. catulus Blackm. 28-21 Id. Wyom.
21676. fivazi Blackm. 28-23 N.Y. Wis.
21677. iniquus Blackm. 28-27 Wyom. Colo.

Ips
21678. chamberlini Sw. 25-196 Oreg.
21679. ponderosæ Sw. 25-197 Arlz.

Hylocurus
21680. spadix Blackm. 28-188 N.C. Pa.
21681. schwarzi Blackm. 28-189 Tex.

Micracisella Blackm. 28-192
(*Pseudomicracis*‖Blackm. nec Egg.)
21682. lignator Blackm. 28-195 Ariz.

Thysanoes
21683. xylophagus Blackm. 28-198 Ariz. N.Mex.

Pseudothysanoes
21684. bopkinsi Blackm. 28-200 Cal.
21685. phorodendri Blackm. 28-202 Tex. Ariz.
21686. sedulus Blackm. 28-204 Ariz.
21687. gambetti Blackm. 28-205 Ariz. N.Mex.
21688. barberi Blackm. 28-206 Ariz.

APPENDIX

CALOSOMA AS ARRANGED BY BREUNING; NUMBERS OF 1920 CATALOGUE AND 1927 SUPPLEMENT IN PARENTHESIS.

Calosoma Web.

179. aurocinctum Chd. (179)
180. scrutator Fab. (180)
181. willcoxi Lec. (181)
182. sycophanta L. (182)
splendidum Dej. W.I. Fla.
(*Syncalosoma*) (*Caminara* Motsch.)
183. frigidum Kby. (183)
levettei Csy.
(*Callistriga* Mots.)
? alternans Fab. 92-146 W.I. U.S. ?
ab. cupraescens Roe
184. sayi Dej. (as subsp. of alternans) (184)
virginica Csy.
armatum Lap.
abdominale Géh.
(*Chrysostigma* Kby.)
204. calidum Fab. (204)
lepidum Lec. (204a)
expansa Csy.
laticollis Csy.
comes Csy. (204b.)
204d. stellatum Csy.
concreta Csy. (204c)
205. morrisoni Horn (205)
206. tepidum Lec. (206)
irregulare Walker
cælator Csy.
indigens Csy.
pallax Csy. (206a)
cogitans Csy. (18566)
semicuprea Csy. (206b)
(*Tapisnothenes*)
207. cancellatum Esch. (207)
ænescens Lec.
esuriens Csy. (207a)
transversa Csy. (207b)
rectilatera Csy. (18568)
praestans Csy. (18569)
sagax Csy. (18567)
(*Carnegonia*)
186. prominens Lec. (186)
angulatum‡Lec.
186a. parvicollis Fall (187)
subgracilis Csy.
clemens Csy. (188)
pertinax Csy. (18565)
195. lecontei n.n. Csiki
lugubre‖Lec. (195)
marginalis Csy.
(*Carabiosoma*)
185. angulatum Chev. (185)
angulicolle var. Chd.
uniforme Géh.
? glabratum Dej. S.Am.
194. peregrinator Guér. (194) subsp. of glabratum
carbonatum Lec. (196)
forreri Géh.
affine Bates nec Chaud.
ingens Csy. (194a)
amplipennis Csy. (194d)
apacheana Csy. (194c)
191. sponsa Csy. (191) subsp. of glabratum

Calosoma Web.

parviceps Csy. (190)
eremicola Fall (192)
rugosipennis Schffr. (193)
hospes Csy. (189)
? affine Chd. Mex.
199. tristoides Fall (199) subsp. of affine
198. triste Lec. (198) subsp. of affine
200. obsoletum Say (200)
microsticta Csy. (200a)
201. semilaeve Lec. (201)
davidsoni Csy. (201a)
adjutor Csy. (201b)
202. simplex Lec. (202)
(*Callitropa*)
176. externum Say (176)
longipenne Dej.
177. macrum Lec. (177)
178. protractum Lec. (178)
dolens Chd.
truncatum Géh.
(*Paracalosoma*)
197. pálmeri Horn (197)
(*Blaptosoma*)
? læve Dej.
203. haydeni Horn (203) subsp. of laeve
(*Callisthenes* Fisch.)
209. moniliatus Lec. (209)
laquaetus Lec. (209a)
bicolor Walker 66-313
vancouverensis Csiki
209b. concinnus Csy. (209b)
210. wilkesi Lec. (210)
211. discors Lec. (211)
inversus Csy. (211a)
211b. schaefferi n.n.
for irregularis‖Schffr. (212)
211c. dietzi Schffr. (213)
tularensis Csy. (213a)
gravidulus Csy. (213b)
latipennis Csy.‡nec Horn
208. subæneum Chd. 69-28 (208)
208a. latipenne Horn (221)
208b. opimum Csy. (221b)
arcuatus Csy. (221a)
219. luxatum Say (219)
219e. zimmermanni Lec. (214)
opacus Géh. (214a)
tegulatus Csy. (216a.)
viator Csy. (216b)
debilis Csy. (18570)
parowanum Csy. (18571)
ab. pimeloides Walker (217)
pustulosus Csy. (218)
ab. monticola Csy. (219a)
nevadensis Csy. (219b)
ab. diffractum Csy. (219c)
ab. striata n.n.
for striatulus‖Lec. (215)
exaratus Csy. (216)
reflexus Csy. (18572)
utensis Csy. (18573)
semotus Csy. (18574)
ab. subasperatus Schffr. (220)
ab. klamathensis Csy. (219d)

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THIRD SUPPLEMENT TO CATALOGUE OF COLEOPTERA OF AMERICA, NORTH OF MEXICO

ADDITIONS AND CORRECTIONS TO DECEMBER 31, 1933

CICINDELIDÆ

Nicolay and Weiss 32

Amblycheila

21689. picolominii is a good species. fide Martin 32-111
Cal.

Cicindela

21690. alata Lilj. 32-215
Ill.
According to Nicolay and Weiss 32:
45e. auguralis Csy. is variety of limbalis
45 d is synonym of 45

CARABIDÆ

Darlington 31; Lapouge 31; Netolitsky 31; Fall 32; Jeannel 31; Valentine 31, 32; Csiki 31, 32; Brown 32.

Scaphinotus

21691. confusus Darl. 31-146
N.C.
128a is valid as subspecies, fide Darl. 31.
angelli Beut. is synonym of guyoti, fide Darl. 31.

Maronetus

21692. unistriatus[1] Darl. 31-149
N.C.

Sphaeroderus

21693. multicarinatus Darl. 31-151
N.C., Tenn.

Carabus

Lapouge in Genera Insectorum, fasc. 192 a-b, 1931, treats the species of Carabus as a subtribe, Carabina, divided into genera and subgenera. Our sylvosus is placed in the genus Eocarabus, subgenus Tanaocarabus; taedatus in genus Oreocarabus, subgenus Neocarabus; chamissonis in genus Hemicarabus, subgenus Cryocarabus. 170a and 169f, are treated as subspecies; the other names under 168, 169 and 170 as synonyms or as varieties of the recognized subspecies.

Calosoma

The same method is used by Lapouge for Calosoma, which becomes subtribe Callisomina, divided into four genera and twelve subgenera. Of these Isostenia contains 210, Lyperostenia contains 198, Paratropa contains 177 and 178, Acamegonia contains 194; the remainder are nearly the same as in Breuning's arrangement given in Appendix to our second supplement. In the treatment of the specific names Lapouge differs in many instances with Breuning. They appear to agree that 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 194, 195, 200, 201, 202, 204, 205, 206, 207, 208, 209, 210, 211, 219, are good species; but differ as to the status of many other names.

Callisthenes

According to Lapouge, if this genus is recognized as separate from Calosoma, Callitropa, for 176, 177, 178, 186, 195, 194 (with subsp. incerta Lapouge 24-38) and 201, and Caminara for 184, must also be recognized.

Loricera
241. pilicornis (Fab.) 75-243 is correct name fide Van Dyke, i. litt

Nebria
21694. appalachia Darl. 31-153 N.C., Tenn

Bembidion
21695. bryanti Carr 32-191 Br.Am., N.W.T.
(*Furcacampa* n. subg. Netolitsky 31-158) 705 is the type.

Microtrechus
21696 barberi Jeannel 31-444 N.C.

Trechus
910b. brachyderus Jeannel 31-432 Mont.
20711a. arcticollis Jeannel 31-428 Idaho
21697. gravidulus Jeannel 31-429 N.Mex.
21698. beutenmülleri Jeannel 31-436 N.C.
21699. schwarzi Jeannel 31-437 N.C.

Pseudanophthalmus
20715a. limicola Jeannel 31-451 Va.
20715b. parvicollis Jeannel 31-452 Va.
921a. stricticollis Jeannel 31-466 Ind.
921b. morrisoni Jeannel 31-466 Ind.
21700. intermedius Valentine 31-249 and 32-276 Tenn.
21701. robustus Valentine 31-250 Tenn.
21702. punctatus Valentine 31-250 and 32-266 Va.
21703. higginbothami Valentine 31-251 W.Va.
21704. hirsutus Valentine 31-252 Tenn.
21704a. delicatus Valentine 32-270 Va.
21705. lodingi Valentine 31-252 Ala.
21706. humeralis Valentine 31-253 Tenn.
21706a. brevis Valentine 32-273 Tenn.
21707. gracilis Valentine 31-253 Va.
21708. grandis Valentine 31-254 W.Va.
21708a. elongatus Valentine 32-265 W.Va.
21708b. orthosulcatus[1] Valentine 32-265 W.Va.
21709. fuscus Valentine 31-254 W.Va.
subæqualis Valentine 31-255 W.Va.
21709a. constrictus Valentine 32-267 W.Va.
21710. potomaca[1] Valentine 32-262 W.Va.

Pseudanophthalmus
21710a. senecæ[1] Valentine 32-263 W.Va.
21711. hypertrichosis Valentine 32-266 W.Va.
922a. bathycola Valentine 32-268 Va.
21712. digitus[1] Valentine 32-270 Tenn.
21713. rotundatus Valentine 32-271 Tenn.
21714. fulleri[1] Valentine 32-272 Tenn.
21715. alabamæ Valentine 32-273 Ala.

Horologion Valentine 32-2
21716. speokites[1] Valentine 32-3 W.Va.

Pterostichus
1004, add idahoensis Casey as syn. fide Darl. 31.
(*Gastrellarius*)
21717. unicarum Darl. 31-155 N.C., Tenn.
(*Monoferonia*)
21718. primus Darl. 31-159 N.C., Tenn.
1476a. plethorus Darl. 31-161 N.C.
21719. carolinus Darl. 31-162 N.C., Ga.
21719a. fumorum Darl. 31-163 N.C.
1477. diligendus Chd. fide Darl. 31, with osculans Csy. and apalachius Horn as syn.

Rembus
This genus in Col. Cat. pars 115, is placed in a tribe Oodini and separated from Licinini

Dicaelus
21720. darlingtoni Fall. 32-19 Fla.

Calathus
The changes made in the Platynini in Col. Cat. pars 115, are numerous, beginning with the reduction of the tribe to a subtribe, Agoni, and introducing many new names for genera, subgenera, preoccupied species names, etc. In Calathus the synonymy announced in our first supplement is disregarded.
Unless otherwise noted all of the following changes in the subfamily Harpalinæ are suggested by Csiki in Col. Cat. pars 115 or pars 124.

Pristodactyla
1488b. brunnescens Mann. 52-204 Aleut.Is.
1488c. breviuscula Mann. 52-204 Aleut.Is.

Laemostenus
1494 is removed to Aechmites Schauf. 65-88

Platynus
Is treated as Agonum with many subgenera, as follows:
(*Agonodromius*) Reitt. 08-139
Includes 1573, 1574, 18888, and 18886, 18887, as var. of 1573.

Platynus

(*Batenus*) Motsch. 64-317
Includes 1563, 1564.
(*Platynomicrus*)
Includes 1589, 1888?
(*Oxypselaphus*) Chaud. 43-415
Includes 1532. 1592 (Anchus Lec. 1854)
(*Europhilus*)
Includes 1587, 1588
(*Rhadine*)
Includes 1495 to 1506, 1880? to 1880?
(*Platynidius*)
Includes 1507 to 1509, 1880? to 1881?
(*Anchomenus* and *Agonum*)
Include the remaining species except 1593

1576. ruficorne Goeze 77-663 (= albipes Fab. 96-33) is transferred from Agonum to Anchomenus.

1584. lene Dej. 28-166 (= ruficornis Lec., picipennis var. Kby., gratiosus Mann.) remains in Agonum.

1587. picipennis Kby. (= lenum Lec. etc.) in Europhilus

Colpodes

Is treated as a genus.

Perigona

Is treated as a tribe, Perigonini discicollis Chd. 76-353 is given as syn. of 1601.

Atranus

Is transferred to subtribe Agoni

Anchonoderus

1608. horni n.n. Csiki 31 (= apicalis Horn nec Reiche)

Colliuris

(*Odacanthella*)

1612a. picta is a good species

1612b. suturalis is a var. of picta
(*Calocollius*)
1613 is placed in this subgenus
All the species from 1610 to 1614 are placed in the tribe Colliurini; 1622 to 1625 in tribe Zuphiini; 1635 to 1638 in tribe Cyclosomini; 1639 in tribe Nematotarsini. The species 1637 and 1638 are in subg. *Personocellus*.

Lebia

1671. add syn. axillaris Lec. 48-193 Csiki in Col. Cat. pars 124 revives chalcoptera G. & H. (flaviventris‖Mots.) and as synonyms, cupripennis Boh., erythrocephala Dej. and brunnicollis Mots.
(*Metabola*)
1651 is placed in this subgenus
(*Dianchomena*)

Lebia

1675. ? flavolineata Mots. 64-227 is added as a synonym
(*Aphelogenia*)

1681. flavoguttata Chev. 35 No. 161 is added as synonym.
connecta Chd. 71-40 added as a variety.

Coptodera

This genus and Phloeoxena are placed in a subtribe Catascopi. Synonymy under 1688 is compared with rutila Bates from Brazil.

Dromius

(*Dinodromius*)
1691 and 1692 are placed in this subgenus.
1691 to 1701 are placed in subtribe Dromii.

Blechrus

The genus name Microlestes is preferred, and Casey's arrangement is substantially adopted except that linearis Lec. is made a synonym.

Metabletus

1699 is made a separate genus.

Axinopalpus

19006 is syn. of 1700;
19007 is syn. of 1701.

Euproctinus L. & M. 27-14
(*Euproctus* Sol. nec Gené)
(*Andrewesella* Csiki 32-1456)

Callida

21721. rubricollis Dej. 25-225 Cuba, U.S.
elegans Chd. 44-469
subtribe Callidi includes 1705 to 1724.

Plochionus

(*Menidius*)
1723 and 19014 belong in this subgenus

Cymindis

1725 to 1759 form subtribe Cymindina
1740 is syn. of 1744;
1738a is syn. of 1738;
1743 is transferred to Pinacodera

Pinacodera

fuscicollis Mots. 64-298 is syn. of 1725
planipennis Csy. 13-184 (nec Lec.) is syn. of 1901b.

Pentagonica

This genus is placed in the tribe Scopodini
americana Mots. 64-224
is syn. of 1760

Inna

This genus is placed in the tribe Euchilini

Chlænius

This genus in Col. Cat. pars 115 is divided into subgenera:
Epomis for 1806
Glyptoderus for 1804
Chlaenius s. str. for remainder

Chlænius
1804. aurolimbatus Laferte 54-261
chrysopleurus Chd. 56-276
? validus Chev. 35 No. 174 is valid but ? N.Am.
1810. exaratus Laferte 51-249 is valid
1813. cœrulicollis Chd. 76-78
insperatus Horn 85-134
1814. emarginatus‡Kby. and
indutus Laferte are syn.
1817. impunctifrons‡Kby. is syn.
1831. 1831a and chlorophanus Lec. 48-345 are syn.
1836. lecontei Hald. 43-304 is syn.
1841. kuntzeni n.n. Csiki
for diffinis‖Chd. nec Laferte
21722. regularis Lec. 49-179
21722a. apacheanus Csy. 14-34
1848. rufilabris Dej. 26-329 is syn.

Oodes
1862 is subgenus Lachnocrepis
1871 is transferred to Oodes s. str.
1872 is subgenus Stenocrepis

Dercylinus
1877 is transferred to this genus

Geopinus
This genus is placed in subtribe by Csiki Col. Cat. pars 121, from which also following notes are derived.

Piosoma
In subtribe Diorychi with Selenophorus, etc.

Nothopus
In subtribe Euryderi (name Euryderus for genus)

Cratacanthus
In subtribe Acinopi

Glanodes, Opadius, Pharalus
All made subgenera of Harpalus,
1895. indianus n.n. Csiki
for testaceus ‖ Lec. nec. Hald.

Harpalus
(*Pardileus*)
Includes 1910, 1915, 1919, 1920 (synonymy reversed), 1922, 1925. 1925a
(*Harpalus* s. str.)
1935. montuosus n.n. Csiki
for montanus ‖ Lec. nec Sturm
1936. baergi n.n. Csiki
for rufimanus ‖ Lec. nec Marsh
1971. fulgens n.n. Csiki
for nitidulus ‖ Chd. nec Steph.
1979. funerarius n.n. Csiki
for funestus ‖ Lec. nec Serv.
1996. transpose synonymy
2006. read basilaris Kby. 37-41
obesulus Lec. 52-185
extensus Walk. 66-314
The four names unrecognized by American authors, viz.: ventralis Lec., oodioides Chd., comis Hald., and curtatus Mann., are treated by Csiki as good species. He also alters spelling of 19076 and 19079.

Selenophorus
The subtribe Diorychi includes this genus, Piosoma, Gynandropus, Hartonymus, and Trichotichnus for 2010, 2011, 2012, 2013, 19094. Selanalius Csy. and that author's subgenera are not recognized.
2015. iripennis Say is the name preferred.
2020. schaefferi n.n. Csiki
for angulatus ‖ Csy. nec Chd.

Discoderus
This genus is placed in subtribe Anisotarsi, which includes also all the species from 2070 to 2144, plus 2155, 2270, 2271, and 2272.

Anisodactylus
Includes as subgenera Gynandrotarsus (= Triplectrus, Cephalogyna, and Haplocentrus).
2082. dilatatus Say 34-431 is syn.

Dicheirus
The species immanis Horn and depressicollis Mots. are treated as good species.

Anisotarsus
2130. Genus Stilbolidus suppressed. Synonymy reversed.
2131. add syn. læviusculus Chd. 37-43.
2132. synonymy reversed.
2135. similis Say 23-29 with
agilis Dej. as syn.

Pelmatellus
2155. synonymy reversed.

Trichocellus
21723. porsildi Brown 32-3 N.W.T.

Bradycellus
The subtribe Bradycelli, fide Csiki, includes Trichocellus, Bradycellus (with subgenera Triliarthrus, Catharellus, Stenocellus, Amerinus, and Liocellus (= Glycerius). He appears to have been ignorant of Fall's remarks re Tachycellus in 1930.
2167. lecontei n.n. Csiki
for cordicollis ‖ Lec. 48-306

Acupalpus
The species from 2205 to 2244 form a subtribe Acupalpi, with one genus divided into subgenera: Acupalpus s. str., Philodes, Goniolophus, Stenolophus, and Agonoleptus.
(*Stenolophus*)
21724. laticollis Mots. 64-202 La.
? splendidulus Mots. 64-201 N.Am.

Agonoderus
The species from 2245 to 2269 are treated as subtribe Agonoderi, all in one genus
2261. similis Lec. 73-325 nec Kby. is syn.

Pogonodaptus
2273. This genus is also included in Agonoderi.

Polpochila
This name replaces Cratocara. The genus is placed in subtribe Anisotarsi.
2270. richli Schaum. 68-126 is a syn.

DYTISCIDÆ

Brown 31, 32; Fall 32.

Derovatellus Sharp. 80-286
21725. floridanus Fall 32-146 Fla.

Hydroporus
21726. compertus Brown 32-4 B.C.
2476. pinguis Fall (19191) is a syn.
21727. deceptus n.n. Fall 32-145
for addendus Fall nec Cr.
2522. æquus Fall (19222) is a syn.
20775. brodei Gell. is a var. of 2486.
21728. barbaræ[1] Fall 32-146 So.Cal.
(Neophorus) Guignot 31-47
19202 is placed in this subgenus

Agabus
21729. verus Brown 31-115 Man.
21730. verisimilis Brown 32-4 B.C.

GYRINIDÆ

Gyrinus
21731. instabilis Fall 31-155 Alas.
21731½ opacus var. blairi n. n.
Omar Cooper 31-239
(= lecontei O.C. 30-68
nec Fall) Greenland

LIMNEBIIDÆ *

Ochthebius
21732. insulanus Brown 31-116
Vanc.

Limnebius
21733. columbianus Brown 32-5
B.C.

HYDROPHILIDÆ

Hydrophilus
The species 2789 to 2791 belong in this genus.
fide Mutchler 31

Hydrochara Berthold 1827
The species 2793 to 2796 belong here.

Tropisternus
21734. columbianus Brown 31-119
Vanc.

Enochrus
21735. collinus Brown 31-118 Que.

Cercyon
19287. kulzeri Knisch 22-97,
fide Blackwelder 31-19
californicus Fall 24-251

LEIODIDÆ

Hydnobius
21736. simulator Brown 32-6 B.C.

Leiodes
21737. validus Brown 32-202 Que.
21738. impersonata Brown 32-203
Que.

Leiodes
21739. bradorata Brown 32-204
Que.
21740. potens Brown 32-205 Que.

* For the establishment of this family, see the writings of Böving and introduction to second supplement.

STAPHYLINIDÆ

Pinophilus

21741. confusus Fall 32-56 N.C., Fla.
21742. gracilis Fall 32-57 La.
3884 is syn. of 3883, fide Fall 32

Aræocerus

21743. elegans Fall 32-57 Tex.

Megaquedius

Is not generically distinct, fide Gridelli 14

PSELAPHIDÆ

Rhexidius

21744. perscitus Fletcher 32-29 N.C.

Arthmius

21745. morbus[1] Fletcher 32-33 Ariz.

Reichenbachia

21746. snowi[1] Fletcher 32-31 Ariz.
21747. ignobilis[1] Fletcher 32-32 Ariz.
21748. gentilis[1] Fletcher 32-33 Cal.

Hamotus
(*Hamotoides*)

21749. opimus Fletcher 32-34 Fla.
21750. elongatus Brend. 90-239 Ariz.

MELYRIDÆ

Endeodes

21751. insularis Blackwelder 32-134 Cal.
21752. rugiceps Blackwelder 32-135 Cal.

Malachius

21753. californicus Barrett 31-102 Cal.

Trichochrous

21754. blackwelderi Blais. 31-323 Cal.
21755. varipes Blais. 31-180 Cal.

Menovectura Blais. 31-181

21756. serrulata Blais. 31-182 Cal.

Listrus

21757. inyoensis Blais. 31-178 Cal.

Eschatocrepis

21758. desertus Blais. 31-329 Cal.

Allonyx

Corporaal 32 states that this generic name is preoccupied by **Allonyx** Jacq. Duv. 60-196.

TELEGEUSIDÆ

Telegeusis

21759. nubifer Martin 31-91 Ariz.

MELOIDÆ

Epicauta

21760. magnomaculata Martin 32-169 Cal.

PYTHIDÆ

Rhinosimus

8215. lecontei n.n. Blair 32-254 Alas.
æneirostris‡Lec. 79-4 nec Mann.
8217. viridiaeneus Rand. 38-23 Me. Ind. Can.
æneirostris Mann. 53-45
nitens Lec. 66-168

PYROCHROIDÆ

Dendroides

8225. canadensis Latr. 1810,
fide Barber 32-36
bicolor Newn.
21761. pacificus Barrett 32-171
Cal.

ANTHICIDÆ

Notoxus

21762. parvidens Fall 32-62 Alta. Wyo.

CEBRIONIDÆ

Cebrio

21763. knausi VanD. 32-464 Utah

Scaptolenus

21764. socius Fall 32-60 Tex.
21765. fuscipennis Fall 32-61 Ariz.

PLASTOCERINÆ*

Euthysanius

21766. cribricollis VanD. 32-455
Cal.
21767. piceus VanD. 32-456 Cal.

Octinodes

21768. amplicollis VanD. 32-459
Cal.

Aplastus

21769. cylindricus VanD. 32-461
Utah
21770. arizonicus VanD. 32-462
Ariz.
21771. pilosus[1] VanD. 32-463 Cal.

Euplastius

8539 and 8540 doubtfully U.S.
fide Van Dyke

ELATERIDÆ

Benedict 31; Fall 32; Van Dyke 32.

Adelocera

21772. nobilis Fall 32-58 Ariz.
21773. candida[1] Fall 32-59 Ariz.
21774. mexicana Cand. 57-70
fide Fall, occurs in Fla. Ariz.
(VanD.)
21775. maculata Lec. 66-389,
fide VanD., occurs in Cal. B.C.

Conoderes Esch. 29-31
(*Monocrepidius* Esch. 29-31)
21776. bicarinatus[1] VanD. 32-297
Ariz.
21777. varians (Steinh.) 75-121
Ariz.
21778. amplicollis (Gyll.) 33-194
Ala. Fla.
fucosus Blatch. 25-163
According to VanD. 32:
8605 is syn. of 8604
8608 is syn. of 8607
(*Heteroderes* Latr. 34-155)
8606 belongs here. fide VanD. 32.

Limonius

21779. pictus VanD. 32-343 No.Cal.
21780. bicolor VanD. 32-344 Cal.

Limonius

21781. nebulosus VanD. 32-345 Ariz.
21782. huguenini VanD. 32-346
Cal.
21783. ulkei Horn 71-314 is valid,
fide VanD. Cal.
21784. clypeatus Mots. 59-369 is valid,
fide VanD.
8620a. seminudus VanD. 32-348
Cal. Wash.
Id.
21785. ursinus VanD. 32-349 Colo.-Alta.
21786. kuschei VanD. 32-349 Cal.
21787. lanei VanD. 32-350 Wash.-Alta.
21788. beutenmuelleri VanD. 32-351
N.C.
according to VanD. 32:
8623 = var. of 8648,
8628 = 8627,
8638 = var. of 8630
8644 = var. 8647.
8651 = var. of 8630,
8655 = 8647,
Nothodes = Limonius,
Pheletes is a subgenus in Limonius,
8652 belong in Athous

* Reduced to a subfamily of Cebrionidae, Plastocerinæ, by Van Dyke 32, by Hyslop 23, and by Böving 31.

Leptoschema

8656a. elegans VanD. 32-357 Cal.

Elathous Reit. 90-317
8657 and 8658 belong here fide VanD. 32
8659 = 8658, fide VanD. 32
21789. californicus VanD. 32-359 Cal.

Athous

21790. appalachius VanD. 32-372 N.C.
8666a. carmeli VanD. 32-374 Cal.
8666b. angelicus VanD. 32-374 So.Cal.
8696a. sierræ VanD. 32-376 Cal.
8660a. maritimus VanD. 32-378 Cal.Or.
21791. brevis VanD. 32-379 Cal.
21792. sordidus[1] VanD. 32-380 So.Cal.
21793. rufipennis[1] VanD. 32-380 Cal.
21794. essigi VanD. 32-381 Cal.
21795. arizonicus VanD. 32-384 Ariz.
21796. erebus[1] VanD. 32-385 Mich.
8676a. reflexus Lec.
8676b. lengi Dury
According to VanD. 32:
8674. scissus Lec. 57-46 (= ingens Fall)
8664 is var. of 8660
8671 is syn. of 8667
8683 is subsp. of 8682
8688 is syn. of 8662
8672 is subsp. of 8666,
8798 belongs in Athous
21797. simplex Lec. 76-516 is valid,
8678 is doubtfully N. Am.
8661 is a European sp.
8697 belongs in Lilius

Ludius

21798. uliginosus VanD. 32-408 Cal.
21799. silvaticus VanD. 32-409 Cal.
21800. aplastoides VanD. 32-411 Cal.
21801. atlas VanD. 32-412 Cal.
21802. dolorosus VanD. 32-413 Cal.
21803. tenellus VanD. 32-414 Cal.
21804. patricius[1] VanD. 32-415 Wash.
21805. humboldti VanD. 32-415 Or.Cal.
21806. tahoensis VanD. 32-418 Cal.
21807. rainieri VanD. 32-421 Wash.
21808. nunenmacheri VanD. 32-422 Cal.
21809. shastensis[1] VanD. 32-423 Cal.
21810. blaisdelli VanD. 32-424 Cal.
21811. appalachius VanD. 32-425 N.C.
21812. hoppingi VanD. 32-434 B.C.

Ludius

According to VanD. 32:
8704 is syn. of 8705,
8707a is syn. of 8708,
8716 is syn. of 8714,
8723 is syn. of 8711,
8731 is subsp. of 8730,
8732 is subsp. of 8730,
8739 is subsp. of 8730,
8733a. pygmæus VanD. 32-418 Man.
8737 is subsp. of 8733,
8736 is subsp. of 8733,
8738 is subsp. of 8733,
8755 is subsp. of 8754,
8742 is race of 8741,
8743 is same as 8745. N.B.-Or.
8784 is female of 8707,
8781 is subsp. of 8797,
8749 is subsp. of 8791,
8791b. diversicolor (Esch.)
8791c. russicollis (Germ.)
8791a. is syn. of 8791 ,
8782 is syn. of 8780,
8751a. brunnipes Bland
8758 and 8759 are syn. of 8712,
8783a. lateralis Lec.
8788 is subsp. of 8785.
8777a. tinctus Lec.
8746 is subsp. of 8774,
8786 is subsp. of 8787,
8767 is subsp. of 8766,
8790 is var. of 8787,

Elater

(including *Ectamenogonus*)

21813. ursinus VanD. 32-301 Cal.
21814. fenyesi VanD. 32-302 Cal.
8973a. uteanus VanD. 32-303 Utah
21815. varipilis VanD. 32-306 Cal. B.C.
21816. bimaculatus VanD. 32-307 Cal.
8927a. hoppingi VanD. 32-306 B.C.
21817. brunneicolor VanD. 32-308 Cal.
21818. brevis VanD. 32-309 Wash. B.C.
21819. sturmi Germ. 44-188 is valid, fide VanD. 32
8949 = 8975, fide VanD. 32
8953a is valid, fide VanD. 32

Megapenthes

21820. illinoiensis[1] VanD. 32-314 Ill.
21821. obtusus VanD. 32-315 N.Mex. Ariz.
21822. variolatus VanD. 32-316 Ariz.
21823. megalops VanD. 32-317 Ariz.
According to VanD. 32:
8981. aterrimus (Mots.) 59-382
8642 belongs here
8972 belongs here
8789 is syn. of 8787
8793c. ater VanD. 32-430 Cal.
8794a. olympiæ VanD. 32-431 Cal.

Eanus
21824. granicollis VanD. 32-435 Wash.

Hypnoidus
(*Cryptohypnus*)
21825. glacialis VanD. 32-326 Mont. B.C.
8831a. hirsutus VanD. 32-327 Utah
8824 is syn. of 8825, fide VanD. 32

Paroedostethus VanD. 32-327
21826. relictus[1] VanD. 32-328 Cal.

Melanactes
21827. agrypnoides[1] VanD. 32-446 Ariz.

Sericus
21828. rugosus VanD. 32-452 Cal.

Agriotes
21829. cylindricus VanD. 32-447 Cal.
21830. bivittatus VanD. 32-448 Or.
21831. criddlei VanD. 32-448 Man.-Wyo.
21832. porosus[1] VanD. 32-449 N.C.
21833. blaisdelli VanD. 32-450 Cal.
8889 and 8890 are subsp. of 8888, fide VanD. 32

Ischiodontus
9009 belongs here

Anchastus
21834. subopacus VanD. 32-321 Cal.
9006a. corvus VanD. 32-322 Cal.
21835. ventralis VanD. 32-322 Ariz.
(? = 9011a)
21836. arizonicus VanD. 32-323 Ariz.
According to VanD. 32:
9003 = 9004,
9008 = 9012,
regularis Mots. = 9004,
recedens Lec. = 9004,
hirsitulus Mots. = 9004,
pilifer Mots. = 9004,

Melanotus
9017a. franciscanus VanD. 32-332 Cal.
9036 and 9057 = 9017

Cardiophorus
21837. aptopoides Cand. 65-40
fide Benedict 31-156 Ariz.

Aptopus
21838. lateralis Mexico
21838a. spadiceus Er. 40-331
fide Benedict i. litt. Ariz.

Horistonotus
21839. umbilicatus VanD. 32-329 Ariz.
21840. lutzi VanD. 32-331 Ariz.

MELASIDÆ

Hypocœlus
21841. californicus VanD. 32-292 Cal.

THROSCIDÆ

Drapetes
21842. cylindricus Fall 32-61 Ariz.

BUPRESTIDÆ

Acmæodera
21843. carlota Fall 31-81 Ariz.
21844. lineipicta Fall 31-81 Ariz.

Glyptoscelimorpha
21845. viridis Chamberlin 31-47 Cal.

Melanophila
21846. arcuata Fall 31-83 Ariz.

Agrilaxia
19651. arizonæ Obenb. 22-180
var. arizonæ Chamberlin 26-46 and 32-836
huachucæ n.n. Obenb. 30-551.

Agrilus
21847. nodicornis[1] Fall 31-82 Ariz.
arbuti Fisher 28 (= manzanita Chamb. 29)
populi Fisher 28 (= trichocarpæ Chamb. 29)

DRYOPIDÆ

Helichus
21848. columbianus Brown 31-118 B.C.

HELMIDÆ

Limnius
21849. cryophilus Musgrave 32-79
Tenn.

HELODIDÆ

Cyphon
21850. cooperi Schffr. 31-174 N.Y.

DERMESTIDÆ

Dermestes
9740. peruvianus Cast. 40-33
(= angustus Csy.)

Perimegatoma
according to Hopping 32-173:
9766. cylindrica Kby. 37-113 (= 9766 and 9767)
9764. 9763 is a syn.

BYRRHIDÆ

Morychus
21851. albertanus Brown 32-8 Alta.

Simplocaria
21852. remota Brown 32-8 N.W.T.

OSTOMIDÆ

Temnochila
21853. sonorana Barrett 32-171Cal.

NITIDULIDÆ

Glischrochilus
21854. quadrisignatus (Say) 35-169,
fide Siepmann 31
21854a. canadensis Brown 32-259
B.C. Ont. Que.
similis Melsh. 46-108
fide Siepmann 31
bipustulatus Melsh. 46-108
fide Siepmann 31
21855. siepmanni Brown 32-259
Que. B.C.
21856. moratus Brown 32-261
Mont. Alta. B.C.

Glischrochilus
10141. lecontei n.n. Brown 32-262
cylindricus ‖ Lec. nec. Oliv.
10138a. rubromaculatus Reit.,
fide Brown 32-255
According to Siepmann 31:
10137a. quadrimaculosus Melsh. 46-108
geminatus Melsh. 46-108

Pallodes
21857. plateosus Schffr. 31-174 Ariz.

CUCUJIDÆ

Cucujus
10221b. subnitens Schffr. 31-175
Ariz. Ut.

EROTYLIDÆ

Ischyrus
10301a. alabamae Schffr. 31-175
Ala.

LATHRIDIIDÆ

Lathridius

21858. laevior[1] Brown 32-208 Que.

ENDOMYCHIDÆ

Epipocus

21859. subcostatus Gorh. Ariz.
fide Benedict 31-156

COCCINELLIDÆ

Korschefsky 31, 32; Dobzhansky 31.

In the arrangement of genera and tribes the following changes are made in Col. Cat. 118 and 120:
Oxynychus Lec. is recognized as genus for 10938.
Pentilia and Pentiliini are used for Microweisea and Microweiseini.
Exoplectra is placed in tribe Exoplectrini.
Rhizobiini are consolidated with Coccidulini.
Psyllobora is placed in Coccinellini.
Cycloneda and Olla are in Synonychini.
Cleis is changed to Mulsantina Ws. 06-34.
Arawana is suppressed in Chilocorus.
Brumus is recognized as valid genus.

The taxonomic changes proposed by Korschefsky are numerous in nearly every genus. They are as follows:

Hyperaspis

Unnumbered names under 10877, 10922, 10923, and 10930, are called aberrations.
The unrecognized names festiva, floridanus,
and annularis, are treated as good species.
The species mendica Muls. 53-232 is included.
10874a is treated as an aberration.
The species subsignata Cr. 74-226 is valid.
19739a may be a good species (pp. 192, 198, 586).
10938 is transferred to Oxynychus.

Brachyacantha

The variety americana Leng 11-302, is said to occur in Ky., Kan., Tex.
10974a is treated as syn. of 10974.
10974b. fulvopustulata Melsh. 47-178.
10972d. troglodytes Muls. 50-534, ab. of 10972.
stellata Csy. syn. of 10972d.
uteella Csy. ab. of stellata.

Microweisea

10991. caseyi n.n. Korsch. 31-223
for minuta ‖ Csy.

Scymnus

The first four of the unrecognized species in our catalogue are treated as valid.
guttiger Muls. is called ab. of 11093.
marginellus " " " " "
11011a is syn. of 11011.

Scymnus

21860. lowei Muls. 50-980, described from Mex. La. Tex. Cal.
19759. minor n.n.
11014. read postpinctus.
11067. calaveras Csy. 99-150 treated as valid.
11033. reverse synonymy.
11115a. (including caseyi Ws. n.n.) treated as syn. of 11115.
femoralis Say is treated as ab. of 11115.

Novius

11130 is transferred to Rodolia.

Psyllobora

11150. borealis, separata, deficiens, called ab.
Four Boh. Eugen. Resa. names are revived.

Anisosticta

11154. is treated as strigata Thunb. 95-113 with bitriangularis Say and multiguttata Rand. as ab.
21861. novemdecim-punctata L. 58-366 as good sp. with irregularis Ws. as ab.

Ceratomegilla

11158. is treated as maculata DeG. with fuscilabris Muls. (= strenua Csy.), and medialis Csy. 99-76, as aberrations.

Adonia

11160. is treated as palæarctic.

Hippodamia

Korschefsky makes aberrations of all the unnumbered names, and adds praticola Muls. 50-125 as an ab. of 11173,
and racemosa Muls. as an ab. of 11165 together with 19761.

11162. tibialis Say is treated as a good species.

Coccinella

The following is the arrangement of Dobzshansky 31:

11181. trifasciata L.
perplexa Muls.
11181a. eugenii Muls.
11181b. juliana Muls. (= barda Lec.)
11181c. subversa Lec.
11183. hieroglyphica subsp. tricuspis Kby.
11183a. humboldtiensis Nun.
11184. novemnotata Hbst.
var. conjuncta Fitch
var. confluenta Fitch
11184a. degener Csy.
11184b. franciscana Muls.
11184d. oregona Csy.
11185. transversoguttata Fald.
var. quinquenotata Kby.
var. transversalis Muls.
11185b. nugatoria Muls.
21862. prolongata Cr.
21862a. sequoiæ Dobz. 31-10. Cal.
21862b. bridwelli Nun.
21863. californica Mann.
var. melanocollis Joh.
var. nevadica Csy.
21864. johnsoni Csy.
11187. nivicola subsp. monticola.
11187d. alutacea Csy.
21865. difficilis Cr. (= vandykei Nun.)
21866. suturalis Csy.
11188. undecimpunctata L.
Korschefsky's arrangement makes aberrations of the unnumbered names in our catalogue with little discrimination, and adds zetterstedti Mader (Evidenz pal. Cocc. 1926 (1930) p. 151, pl. 28, fig. 35, as an ab. of 11185, occurring in Lapland and Canada.

Neoharmonia

This is treated as a subgenus of Coccinella.
11178 (= 11179).

Cycloneda

11189 (= 11189a).
11191. spelling changed to ater

Olla

11192. binotata Say 26-302 is cited as a synonym
(erroneously ? compare 10879).

Adalia

Our unnumbered names are treated generally as aberrations.

11193a. schuetti Park 29-429 is a syn. of sesquipunctata Haw. 12-272
fide Mader 31-476

Cleis

Mulsant used this name twice, on page 135 and again on page 208, but corrected the error on page 1023 and in his "Table Méthodique." The substitution of Mulsantina Ws. 06-34 therefore seems unnecessary.

11196. impictipennis Ws. 95-125 is added as an ab.

Anatis

11202. The following, each described from a single specimen, are added as aberrations:
caseyi Westcott, Ent. News, xxiii, 1912, 422.
signaticollis Muls. 50-135.

Chilocorus

11217. stigma Say 35-202 is preferred to bivulnerus Muls.
Say's description is doubtfully valid.
11220a and 11220b are treated as synonyms.

Arawana

This genus is erroneously suppressed.

21867. scapularis Gorh. 94-178
Ariz.

Brumus

This genus is correctly recognized.

Epilachna

juncta Joh. is treated as aberration.

ALLECULIDÆ

Knausia Fall 31-15

21868. crassicornis Fall 31-16 N.Mex.

Hymenorus

21869. distinctus Fall 31-179 Miss. Ala. Fla.
21870. molestus[1] Fall 31-182 Pa.
21871. arkansanus Fall 31-183 Ark.
21872. dubius Fall 31-184 Miss. Ala.
21873. caurinus[1] Fall 31-185 B.C.
21874. ulomoides[1] Fall 31-187 So.Cal.
21875. sinuatus[1] Fall 31-187 B.C.
21875a. ebeninus[1] Fall 31-188 Cal.
21876. maclentus[1] Fall 31-188 N.Mex.
21877. atratus[1] Fall 31-189 Ariz.
21878. illusus Fall 31-193 Ala.
21879. bitumescens[1] Fall 31-194 Ariz.
21880. protibialis Fall 31-196 So.Cal.
21881. cassus Fall 31-197 L.Cal.
21882. irritus Fall 31-199 Cal.Ariz.
21883. conformis Fall 31-199 Tex.
21884. vigilax[1] Fall 31-200 Ariz.

Hymenorus

21885. papagonis Fall 31-201 Ariz.
21886. parvus Fall 31-203 L.Cal.
21887. semirufus Fall 31-203 Fla.
21888. capensis[1] Fall 31-205 L.Cal.
21889. jacobinus Fall 31-206 So.Cal.
21890. digressus Fall 31-206 So.Ariz.
21891. montivagus Fall 31-207 So.Cal.
21892. inutilis Fall 31-208 Nev. Ut. N.Mex.
21893. trivialis Fall 31-210 L.Cal.
21894. fuscipennis[1] Fall 31-211 Fla.
21895. caducus Fall 31-213 Ala. Fla.
21896. thoracicus Fall 31-214 So.Cal.
21897. disparatus Fall 31-215 Tex.
21898. oblivius Fall 31-216 Tex.
21899. alienus Fall 31-217 Ariz.
21900. idoneus Fall 31-218 Ariz.
21901. tritus Fall 31-219 Ariz.
21902. incertus[1] Fall 31-220 Ariz.
21903. tenuistriatus Fall 31-226 Ala. N.C.
21904. brevis[1] Fall 31-230 Ariz.
21905. rufovalis[1] Fall 31-230 Ariz.
21906. simidus[1] Fall 31-232 Tex.

Hymenorus

21907. exilis[1] Fall 31-233 Ariz.
21908. facetus[1] Fall 31-234 L.Cal.
21909. horrescens Fall 31-235 Tex. N.Mex
21910. milleporus Fall 31-236 Ariz.
21911. nevadensis Fall 31-236 Nev.
21912. significans[1] Fall 31-237 Tex.
21913. conicicollis[1] Fall 31-239 Ga.
21914. quietus[1] Fall 31-240 Mo.
21915. texensis Fall 31-241 Tex.
21916. heteropygus Fall 31-241 Fla.
21917. inopiatus Fall 31-242 Fla. Ga.
21918. crinitus Fall 31-244 Ariz.
21919. liebecki Fall 31-245 Ariz.
21920. quadricollis Fall 31-246 Tex.

According to Fall 31:

21921. obesus Csy (= pilosus‡Csy. nec Melsh.)
11280 (=11270)
11287 (=11285)
11288 (=11289)
11266 (=19764)

TENEBRIONIDÆ

Blaisdell 31, 32.

Nyctoporis

21922. vandykei Blais. 31-41 Cal.
11702 (= 11703) fide Blais. 31

Apsena

11916a. rufescens Blais. 32-56 L.Cal.
21923. insularis Blais 32-58 L.Cal.
11918a. subvestita[1] Blais. 32-68 So.Cal.
21924. barbarae Blais. 32-61 So.Cal.
21925. leachi Blais. 32-70 Cal.
11920a. opaca Blais. 32-81 So.Cal.
11920b. simplex Blais. 32-84 Cal.
11920 (= 19840) fide Blais. 32

Eleodes

21926. tanneri Blais. 31-74 Utah
21927. strumosa Blais. 31-76 Ut.Nev.
paradoxa Blais. 31-78 n.n. for 11961h.
patulicollis Blais. 31-78 n.n. for 11988b.

Helops

21928. fresnoensis Blais. 31-44 Cal.

Talanus

21929. stenochinus Lec. (= 12484) fide Fall 32-145

MONOMMIDÆ

Schenkling, Col. Cat. pars 117.

Hyporhagus

lecontei Thom. is syn. of lævipunctatus from Cent. & So. Amer.

PTINIDÆ

Ptinus

21930. raptor Str. fide Schffr. 31-176 †Eur. N.Y.

ANOBIIDÆ

Ernobius

21931. schedli Brown 32-9 Ont.

BOSTRICHIDÆ

Tetrapriocera

12872. synonymy should be reversed, fide VanDyke

SCARABAEIDÆ

Brown 31, 32; Fall 32; Barrett 31, 32; Chapin 31; Dawson 32; Sim 31, 32; Schaeffer, 31; R. Hopping 31; Saylor 32.

Phanæus

19944 and 19945 belong here.

Aegialia

21932. convexa Fall 32-183 So.Cal.
13102a. nigrella Brown 31-47 Cal.
13102b. punctata Brown 31-47 Cal.
(*Leptaegialia* Brown 31-12)
21933. humeralis Brown 31-13 (genotype) Ont.N.H. N.Y.
21934. montana Brown 31-14 B.C. Wyo. Colo.
(*Anomalaegialia* Brown 31-15)
13106. spissipes Lec., genotype
(*Psammoporus* Thoms. 63-92)
(*Dimalia* Muls. 71-406)
21935. opaca Brown 31-17 B.C. Alta.
21936. terminalis Brown 31-18 Alta. Colo.
21937. nana Brown 31-19 Mass.
21938. criddlei Brown 31-42 Man. Ont. Alta.

Micrægialia Brown 31-11

13101. pusilla Horn. genotype

Aphodius

21939. testaceiventris Fall 32-185 Kan.
21940. incommunis[1] Fall 32-186 B.C.
21941. fortunus[1] Fall 32-187 Ariz.
21942. claudus Fall 32-188 Tex.
21943. crenicollis[1] Fall 32-189 Cal.
21944. ruficlarus[1] Fall 32-189 Ariz.
13117 is valid. fide Fall.
21945. vandykei Barrett 31-101 Cal.
13205a. sheldoni Barrett 32-172 Cal.
21946. tuberosus Barrett 32-240 Cal.

Atænius

13216b. exiguus Brown 32-10 Fla.

Psammobius

21947. armaticeps Fall 32-190 Fla. Ga.

Psammobius

21948. blandus[1] Fall 32-191 Tex.
21949. mimeticus Fall 32-192 L.Cal.

Lichnanthe Burm. 44-26

13313 to 13319 belong in this genus. which is not a synonym of Amphicoma, fide Chapin i litt.

Serica

21950. imitans Chapin 31-5 N.J.
21951. chætosoma Daws. 32-529 Cal.
21952. ventura Daws. 32-530 Cal.
21953. personata Daws. 32-531 Cal.
21954. caliginosa Daws. 32-532 Cal.
21955. acicula Daws. 32-533 Cal.
21956. pavonia Daws. 32-533 Cal.
21957. falli Daws. 32-534 Cal.
21958. ligulata Daws. 32-535 Cal.
21959. praetermissa Daws. 32-536 Cal.
13355. georgiana Leng, fide Daws. 32 N.H.-Tex.
21247. is subsp. of 19974, fide Daws. 32
19966. is syn. of atricapilla Kby.
13372a. blatchleyi Daws. 32-545 Mass. N.C.
21960. similis Lewis 95-391 Japan, N.Y.
brunnea‡Schffr. 31-176, fide Sim 32-381

Diplotaxis

21961. mus[1] Fall 32-192 Ariz.
21962. protensa Fall 32-193 N.Mex.
21963. villosipes[1] Fall 32-193 Cal.
21964. futilis[1] Fall 32-194 Ariz.
21965. producta Fall 32-195 Tex.
21966. pinalica Fall 32-196 Ariz.
21967. deserta Fall 32-196 Cal.
21968. incuria Fall 32-196 Nev.

Phyllophaga

21969. contaminata[1] Fall 32-197 L.Cal.
21970. extranea[1] Fall 32-198 L.Cal.

Listrochelus

21971. plenus Fall 32-199 Ariz.
21972. juvenilis Fall 32-200 Ariz.

Thyce

21973. bidentata Fall 32-201 Cal.
13633 to 13637 are 13645, fide Fall 32

Dichelonyx

21974. deserta R. Hopp. 31-236 Cal.

Dichelonyx

21975. columbiana R.Hopp. 31-236 B.C.
21976. vandykei Saylor 32-284 Cal.

Pocalta *

21977. leonina Fall 32-203 So.Cal.
According to Fall 32:
13775 (= 13776, 13777, 13778), 13781 (= 13780)

LUCANIDÆ

Diphyllostoma

21978. linsleyi Fall 32-160 Cal.

CERAMBYCIDÆ

R. Hopping 31, 32; Linsley 31, 32; Schaeffer 32; G. R. Hopping 32.

Asemum

(Liasemum Csy.)
Fide R. Hopping 31 the species 14118 and 14119 are valid but not generically distinct from Asemum. All the species under Asemum are synonyms of 14112.

Vandykea Linsley 32-118

21979. tuberculata Linsley 32-118 Cal.

Haplidus

21980. palpalis[1] Linsley 32-114 Ariz.
21981. antennatus Linsley 32-115 Cal.
14150 (= 20017), fide Linsley 32-114

Oeme

21982. rotundicollis Linsley 32-116 Tex.

Eucrossus

14145 (= 20011) fide Linsley 32

Idocmea

This genus not distinct from Styloxus, fide Linsley 32

Methia

21983. fragilis Linsley 32-121 Cal.

Romaleum

14199 (=14200), fide Schffr. 32-152

Pidonia

21984. quadrata R.Hopp. 31-233 B.C.Vanc.

Anoplodera

21286. rubra L. (= planata S. & H.), fide R.Hopp. 32-72

Necydalis

21985. diversicollis[1] Schffr. 32-152 Utah

Molorchus

21986. eburneus Linsley 31-37 Cal.

Poecilobrium

21987. gibsoni R.Hopp. 31-234 B.C.

Anacomis

14614b (=14614d), fide R.Hopp. 31

Clytini, fide G. R. Hopping 32:
Megacyllene suppressed in Cyllene
14691 (= 14690. 14689. 14686, 14687, and 14688)
14680 (= 14681, 14682)
14691c is a good sp. N.B. Me., N.Y. Pa.
14699 (= 14700)
14726 (= 20110, 20111)
14711 (= 14711a, 14710)
14708 (= 14709)
14705 (= 14706)
14728 (= 14729), and goes in Clytus
14730 (= 14731, 14732)
14734 (= 14735)
14736 (= 14737, 14738)
Rhopalopachys suppressed in Neoclytus
Microclytus and Cyrtophorus excluded

Tragidion

21988. texanum Schffr. 32-152 Tex.

Pogonocherus

According to Schffr. 32-154:
15059. is not a var. of 15064
20144. is a syn. of 15064
21989. (schaefferi Linsl. i. litt.) n.n. for vandykei‖Schffr. 32-153 Cal.

* Paracotalpa Ohaus 15-256 (= Pocalta Csy. 15-92), and Parabyrsopolis Ohaus 15-256 (= Parareoda Csy. 15-99), fide Chapin.

CHRYSOMELIDÆ

Blake 31; Beller and Hatch 32; Carr 32; Fall 32; Hatch and Beller 32; Johnson 31; Schaeffer 31, 32; Spaeth 32.

Pachybrachys
Opinions differ as to spelling; some prefer Pachybrachis

Cryptocephalus
21990. pallidicinctus[1] Fall 32-21 So.Cal.
21991. apicedens[1] Fall 32-22 N.Mex.
21992. merus Fall 32-23 Tex.Ariz.
21993. cuneatus[1] Fall 32-24 Ga.
21994. ochraceus[1] Fall 32-25 Fla.

Myochrous
21995. movallus Johnson 31-148 So.Dak.

Chrysochus
15628 is subsp. of 15627, fide Beller & Hatch 32*

Lina
21364c. quadriguttoides Beller & Hatch 32-98 Wash.

Phyllodecta
21996. aklaviki Carr 32-192 N.W.T.

Trirhabda
21997. adela Blake 31-14 Ut. Ill.-Cal.
21998. borealis Blake 31-16 Mass.-Wash
21998a. indigoptera Blake 31-17 So.Dak.-Ill.
21999. neoscotiæ Blake 31-17 N.S.
22000. viridicyanea Blake 31-19 Wis.-Alta.
22001. pilosa Blake 31-20 Wyo.-Cal.
22002. confusa Blake 31-27 So.Cal.
22003. sericotrachyla Blake 31-28 So.Cal.
15724. bacharidis is correct name, fide Blake 31

Derospidea Blake 31-32
15725 (genotype) and 15739, fide Blake 31

Coraia Clark 65-323
15741 belongs here, fide Blake 31

Galerucella
22004. spiræophila Hatch & Beller 32-107 Wash. Or.
15752a. pallida (ab. nov.) Beller & Hatch 32-109 Wash.

Monoxia
15755a. texana Schffr. 32-237 Tex.

Phyllobrotica
22005. antennata Schffr. 32-237 Tenn.
22006. stenidea Schffr. 32-238 N.Y. Pa. D.C.

Pseudoluperus Beller & Hatch 32-115
22007. bakeri Beller & Hatch 32-115 Wash.

Luperus
15822a. asclepiadis Schffr. 32-238 B.C.
(*Calomicrus* Steph. 34-293)
22008. pallipes Beller & Hatch 32-113 Wash.
22009. concavus Beller & Hatch 32-114 Wash.

Monolepta
15857 (= 15813), fide Schffr. 32

Homophœta
15891. cyanipennis Fab. 98 (= æquinoctialis‡) var. octomaculata Cr., fide Blake 31-76

Disonycha
22010. latiovittata Hatch & Beller 32-108. Wash.Mont.
22011. brevicornis Schffr. 31-281 Colo.
22012. nigriventris Schffr. 31-282 Or.Id.Mont.
22013. neglecta Schffr. 31-283 Kan.-Or.
22014. punctipennis Schffr. 31-284 Ia. Minn.
22015. stenosticha[1] Schffr. 31-285 Tex.
22016. laticollis Schffr. 31-284 N.Y.
According to Schffr. 31:
15896b. puncticollis Lec. Cal.
15896c. punctigera Lec. Kan. W.St.
20204a. (= 20205)
21375. uniguttata Say (= 15895b)
22017. procera Csy. (= pallipes‡Blake)

Haltica
22018. kalmiæ viridana Schffr. 32-240 Va.Md.N.C. Tenn.
22019. oregonensis Schffr. 32-241 Oreg.
22020. subopaca Schffr. 32-242 Ariz.

Derocrepis Weise 86-730
According to Schffr. 32:
15969 and 15970 belong here
15971 belong in Chalcoides

Hippuriphila
22021. equiseti Beller & Hatch 32-127 Wash.

Systena
22022. discrepans Schffr. 32-244 Ariz.
22023. variata Schffr. 32-243 Ariz.
16029a. corni Schffr. 32-244 Ala.

Physonota
22024. pacifica Spaeth 32-198 Cal.

* These authors have proposed a number of changes in the rank of names heretofore in use, and in synonymy. They follow Maulik 25 in the use of Chrysolina Mots. for Chrysomela, and Chrysomela L. for Lina (or Melasoma). In some of these changes we await the confirmation of other American authors.

MYLABRIDÆ

Bridwell 32

The name Bruchidæ is used by Bridwell, who proposes subfamilies Bruchinæ, Pachymerinæ, Amblycerinæ, Kytorhininæ (for 21418), and Eubaptinæ (not N. Am.).

PLATYSTOMIDÆ

(Anthribidæ) Jordan 31-281

Brachytarsus

22025. franseria Barrett 31-188
Cal.

CURCULIONIDÆ *

Auletes

22026. mariposæ Zimm. 32-181
Cal.

Rhynchites **

Voss, Koleop. Rund., XVIII, 1932. 153-189, Monogr. der Rhynchitinæ.—Tribus Rhynchitini. In this incomplete work Voss proposes the following changes and additions:

Coenorrhinus Thoms. 59-130
(*Merhynchites* **)
16348 and form ventralis Voss 32-176
cerdonis Voss 32-176 (Schauf. i.l.) Calif.
mandibularis Voss 32-176 Calif.
intermedius Voss 32-176 Calif.
homocidea Voss 32-177 (Schauf. i.l.) Western N.A.
a luctuosa Voss 32-177
(*Pselaphorhynchites* ** Schilsky 03-H.)
16357 16360, 16361
micans Voss 32-183 N.Am.
sanguinipes Voss 32-184 Nevada

Attelabus

(*Himatolabus*)
According to Fall 31:
22027. axillaris Gyll. Ariz.Mex.
21442 is not from Cal.
21441 is syn. of rhois.

Listronotus

According to Buchanan 32-7:
16790 (= ? 16792)
16801 (= 16790‡Weed)

Pissodes

16849 (= 16850), fide Dietrich 31-872

Steremnius Schon. 36-242
(*Paraplinthus* Faust).
22028. tuberosus Boh. 36-243, fide Marshall 32-355 Alas.

Hylobius

16874. congener n.n.
(= confusus‖Kby.) Col. Cat. 122

Hilipus (nec Heilipus)
16877. reverse synonymy.

Myrmex

According to Marshall 32-345:
17103. lineata (Pasc.) 72-454
vittatus Horn 73-448

Tachypterellus

17186a. magna List. 32-10 Colo.
17187a. cerasi List. 32-8 Colo.

Curculio

17161 (= 21509), fide Col. Cat. 122
haroldi is not N.Am., fide Col. Cat. 122
?. coccinæ Patton, Ent. News, 97-76

Anacentrinus Buch. 32-330
Includes fide Buchanan:
22029. subnudus Buch. 32-330 (genotype) La.
17626 (= 17625)
17630 (= 20520, 20521, 30522),
17650 (= 20516),
17624 (= 20519),
20512

Oligolochus

(*Anacentrus* s. str.), fide Buch. 32
17622

* The changes proposed in Col. Cat. pars 114 and pars 122 and 123 are as follows:
The subfamily Eremninæ includes 16499-16500; the subfamily Leptopinæ includes 16501-16592; the subfamily Cylindrorrhininæ includes 16772-16838; the subfamily Hylobiinæ includes 16870-16880, 18008-18012 and 17441-17442.
The subfamily Leptopinæ is divided into the four tribes: Dirotognathini, Promecopini, Leptopini (= Tropiphorini) and Ophryastini.
The subfamily Hylobiinæ is divided into the four tribes: Hylobiini, Liparini, Anchonini, and Sternechini.
The changes in generic and specific names are noted in our text.

** The work of Voss is so incomplete that we think it better, at the present time, to merely call attention to the proposed changes and additions.

Ceutorhynchus

22030. opertus Brown 31-119 B.C.
22031. carteri Brown 31-120 Alta.
22032. handfordi Brown 31-120 Man.
22033. dubitans Brown 31-121 Sask.

Perigaster

17824. reverse synonymy, fide Buch. 31
22034. longirostris Buch. 31-323 Ont. N.J. Wash.

Phytobius

17845. belongs in Litodactylus Redt., fide Brown 32-11 (*Eubrychiopsis*)
22035. albertanus Brown 32-11 Alta.

SCOLYTIDÆ

Phlœosinus

22036. variolatus Bruck 31-126 Cal.
22037. aciculatus Bruck 31-127 Ariz.

Gnathotrichus

22038. denticulatus Blackm. 31-270 Colo.N.Mex. Tex. Ariz.
22039. alni Blackm. 31-271 Colo. (*Gnathotrichoides* Blackm. 31-267)
22040. aciculatus Blackm. 31-272. B.C. Wash. Ore. Cal. Ariz.N.Mex

Pseudopityophthorus

22041. fagi Blackm. 31-228 W.Va.
22042. pubescens Blackm. 31-229 N. C.
22043. granulatus Blackm. 31-230 Ariz.
22044. agrifoliæ Blackm. 31-230 Cal.
22045. pulvereus Blackm. 31-232 Ariz.
22046. yavapaii Blackm. 31-233 Ariz.
22047. opacicollis Blackm. 31-235 Ariz.

Pityophthorus

22048. smithi Schedl. 31-163 B.C.
22049. pygmæus Schedl 31-165 Que.
22050. pilifer Schedl. 31-166 Ont.

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Comstock, Anna B., d. Aug. 24, 1930.
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Dietz, W. G., b. July 30, 1848; d. April 13, 1932.
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Forbes, S. A., b. May 29, 1844; d. March 13, 1930.
Henneguy, L. F., b. March 18, 1850; d. Jan. 28, 1928.
Lewis, George, b. Aug. 5, 1839; d. Sept. 5, 1926.
Manee, A. H., b. March 30, 1858; d. Dec. 26, 1927.
Mann, B. P., b. April 30, 1848; d. March 22, 1926.
Reynolds, L. R., b. April 22, 1878; d. Oct. 9, 1922.
Robinson, Wirt, d. Jan. 19, 1929.
Rousseau, E., b. May 27, 1872; d. Nov. 13, 1929.
Skinner, Henry, d. May 29, 1926.
Taschenberg, O., d. March 20, 1922.
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SECOND SUPPLEMENT TO CATALOGUE OF NORTH AMERICAN COLEOPTERA DESCRIBED AS FOSSILS

By H. F. Wickham

The few fossil beetles described as new in the years 1927 to 1932 inclusive are listed below. Some changes in family assignment are also noted. New abbreviations requiring mention follow.

Ark. Eoc.	Wilcox Clays
Dak. Cret.	Fox Hills, So. Dak.
New Mex. Jur.	Jurassic, east of Santa Rosa.
Oreg. Olig.	Lower John Day Beds.
Tenn. Eoc.	Wilcox Clays.
Vanc. Pleist.	Vancouver Island.
Wash. Mioc.	Beds near Spokane, formerly listed as Eocene.

CARABIDÆ

Pterostichus Bon.
fernquisti Wickh. 31-318 Wash. Mioc.

Carabites Heer
russelli Ckll. 28-37 Dak. Cret.

DYTISCIDÆ

Dytiscus, L.
latahensis Wickh. 31-318 Wash. Mioc.

GYRINIDÆ

Protogyrininus Hatch 27a-92
confinis (Scudd.) 00a-80, nec Lec.
= sculpturatus (Mjöb.). Europe.

PAUSSIDÆ

Paussopsis Ckll.
Does not belong in Paussidae, according to Wasmann 26-25

ELATERIDÆ

Adelocera Latr.
perantiqua Ckll. and LeVeque 31-359 Roan Mt. Eoc.

Elater, L.
berryl Wickh. 29-148 Tenn. Eoc.

TENEBRIONIDÆ

Tenebrionites Ckll.
alatus Ckll. 27c-587 Flor. Mioc.

MELANDRYIDÆ

Silpha colorata Scudd. belongs here, according to Hatch 27b-369. Compared with Emmesa connectens Newm.

SCARABAEIDÆ

Phyllophaga Harr.
disrupta Ckll. 27c-587 Flor. Mioc.

Melolonthites Heer
collinsi Wickh. 29-149 Tenn. Eoc.

PASSALIDÆ

Passalus Fab.
? indormitus Ckll. 27a-65 Oreg. Olig.

CERAMBYCIDÆ

Criocephalus Muls.
? pavitus Ckll. 27c-585 Flor. Mioc.

CHRYSOMELIDÆ

Donacia Fab.
connelli Ckll. 27b-304 Vanc. Pleist.

CURCULIONIDÆ

Otiorhynchites Fritsch
wilcoxianus Wickh. 29-149 Ark. Eoc.

Curculionites Heer
hylobioides Northrop 28-32 Dak. Cret.
vulpinus Northrop 28-36 Dak. Cret.
northropi Ckll. 28-37 Dak. Cret.

POSITION UNCERTAIN

Xiphenax Ckll. 31--97
jurassicus Ckll. (larva) 31-97 New Mex. Jur.

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